

December 1953

50¢

# COMBAT FORCES

Infantry Journal

•

Field Artillery Journal

**PUT REALISM INTO TRAINING**

★

**Combined Arms Won  
Operation Touchdown**

★

**How to Grid Single  
Vertical Photographs**

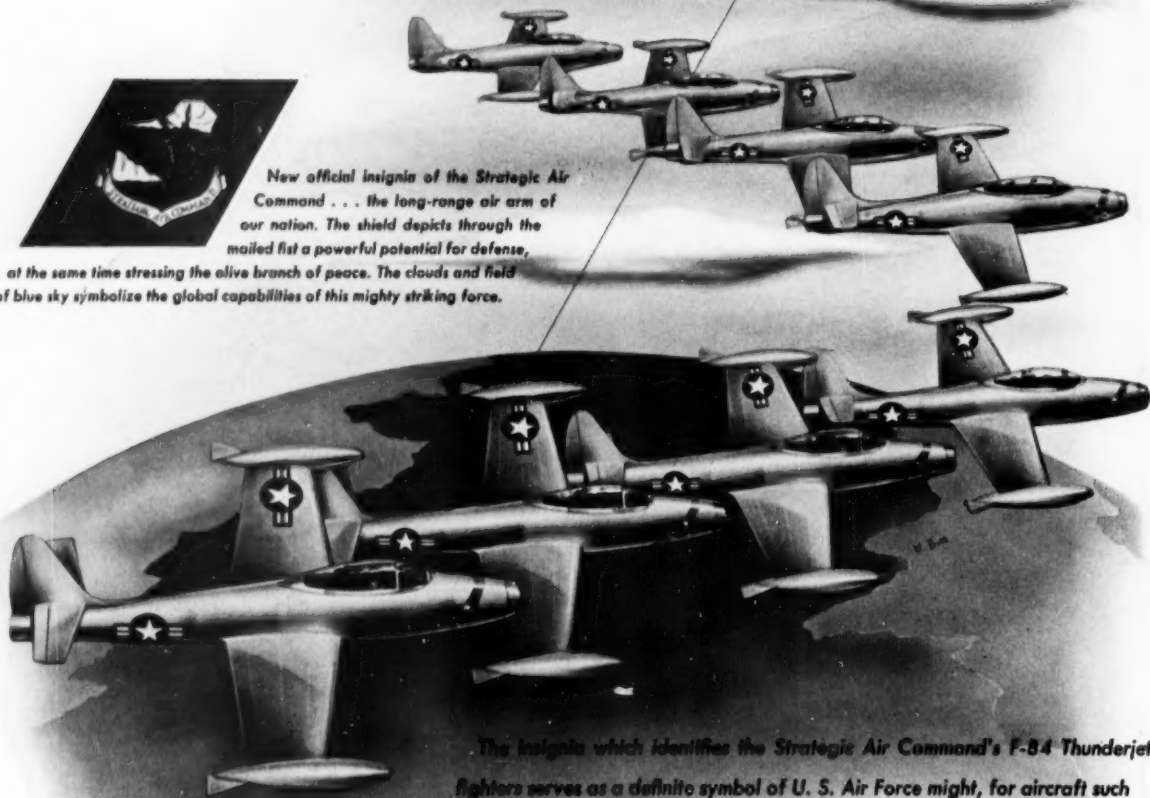
★

**TANKS AND INFANTRY AT NIGHT**

# Salute to the **STRATEGIC AIR COMMAND**



New official insignia of the Strategic Air Command . . . the long-range air arm of our nation. The shield depicts through the mailed fist a powerful potential for defense, at the same time stressing the olive branch of peace. The clouds and field of blue sky symbolize the global capabilities of this mighty striking force.



The insignia which identifies the Strategic Air Command's F-84 Thunderjet fighters serves as a definite symbol of U. S. Air Force might, for aircraft such as the Thunderjets have established their role as an integral and versatile part of strategic air power. Group flights on the same day, such as from the U.S.-to-England and from U.S.-to-Africa, both non-stop . . . using in-flight refueling,\* emphasize the valuable role the F-84 is playing in SAC as a strategic jet fighter airplane with amazing mobility. > >

For these accomplishments and other assuring demonstrations of our air power, credit must fall to the laudable teamwork of each individual in the Strategic Air Command, and to their Commander, General Curtis E. LeMay.

\*AUGUST 20, 1953.  
TURNER A.F.B., GEORGIA TO NOUASSEUR, AFRICA, (31ST STRATEGIC FIGHTER WING)  
TURNER A.F.B., GEORGIA TO LAKENHEATH, ENGLAND, (80TH STRATEGIC FIGHTER WING)

**REPUBLIC AVIATION**



FARMINGDALE, LONG ISLAND, N. Y.

*Makers of the Mighty Thunderbolt · Thunderjet · Thunderstreak*

**Bulldozing** — Hydraulic torque converter lets Allis-Chalmers HD-20 take full advantage of available horsepower, roll bigger loads, tackle tougher dozing jobs. With full control at the throttle, operator can work safely and efficiently, regardless of terrain.



## AN ALLIS-CHALMERS REPORT

# How hydraulic torque converter drive improves big tractor performance — assures longer life

Smooth, cushioning action of hydraulic torque converter drive on the Allis-Chalmers HD-20 greatly reduces strain and shock to both the tractor and its allied equipment under all operating conditions.

Whatever the job, whether pushing, pulling or dozing, the operator need merely make contact with the load and then open the throttle. As the load requirements change, the hydraulic torque converter *automatically* matches the conditions with exactly the right combination of speed and pull.

This eliminates most shifting . . . leads to far more work done in a continuous work cycle . . . far longer equipment life.

Hydraulic torque converter drive, exclusive as standard equipment with Allis-Chalmers, is just one of many reasons why the HD-20 assures higher output with less upkeep.

WEIGHT — 41,000 LB. • 175 NET HP. AT FLYWHEEL

**ALLIS-CHALMERS**  
TRACTOR DIVISION — MILWAUKEE 1, U. S. A.



**Pulling** — Hydraulic torque converter drive actually multiplies torque up to four and one-half times . . . develops tremendous drawbar pull to start the load smoothly . . . and automatically accelerates to the highest speed that conditions permit, in either high or low range.



**Pushing** — Operator just makes contact, then opens the throttle and relaxes. The HD-20 automatically matches speed to that of pushed equipment, maintains steady contact while loading, sends load off to the fill at higher speed.

**Digging and Loading** — With the HD-20G, the operator crowds surely and steadily, using only throttle and bucket levers. With full horsepower always available even at creeping speed, he can work effectively in mud, on hillsides or edges of banks.







**DEADLY ACRID FLAMES** spurt from a white phosphorus grenade as Corporal Henry W. Roark signals his flame thrower into action for the final assault on an "enemy" pillbox. Corporal Roark, fire team leader of a rifle squad at Marine Corps Schools, Quantico, Va., will see no enemy during this problem, is prepared for the real thing in time of war.

by EDGAR A. GUEST

*They are the strength of freedom's wall,  
The men and women, one and all,  
Who serve by land and sea and sky  
That liberty shall never die;  
Sworn all to keep our country free  
From every threat of tyranny.*

*Army, and Navy and Marine!  
All that life holds for us they mean.  
Those Air Force lads who hasten by  
Are valiant guardians of the sky,  
And those who stand at lonely posts  
Are brave defenders of our coasts.*

*G.I.'s or Gobs or Leather Necks!  
The humblest boy who swabs the decks,  
The Wacs and Waves, at work or ease,  
For us are freedom's guarantees,  
All are our stalwart, steadfast friends.  
On them our way of life depends.*

*Brave youth! Draftee or Volunteer  
It matters not. When foes appear  
Who would destroy our glorious land,  
Behind the wall you build we stand,  
Assured that freedom, by your worth,  
Shall never perish from the earth.*

*If you would like a reprint of this poem, suitable for framing, write  
Chrysler Corp., Dept. R83, 341 Massachusetts Ave., Detroit, Mich.*

Copyright 1953 Chrysler Corporation

*This advertisement appears in LIFE December 7, 1953*

## TRIBUTES TO SOME PEOPLE WE ALL LIKE:

### WAGING PEACE IS

This is an especial salute for the men and women in the "enlisted ranks" of Uncle Sam's armed forces. Whether serving at home or overseas, these people have elected to put 10, or 20, or 30 years of their lives against the essential job of holding a hard core of trained personnel ready to man the implements of national defense.

As a nation, we live a long cry from that day in April, 1775, when a handful of rugged Colonists lifted their muskets from their mantel-pieces and went to meet the enemy at Concord.

Amazing as this country's ability has been to turn its people and its production swiftly from needs of peace to those of emergency, it is also grimly clear that a man cannot come home from the office and



**40 MM TWIN MOUNT SCOWLS** DEFIANTLY from the after-island gun tub of the U.S.S. Tarawa as AB 3/c John Robertson mans the No. 1 loader during general quarters. John enlisted in the Navy in 1950, spent 6 months in special schools after boot camp. Unmarried, John plans to see the world as he furthers his own career in the Navy.



**ENLISTED WOMEN** of the Army, Navy, Air Force and Marines are represented by this color guard quartet. All voluntary enlistments, these four typify the loyalty to country of 46,000 women currently serving in the armed forces.



**THE NATION'S ONLY NAVY** from 1790 to 1798, the U.S. Coast Guard is still making history in pioneering new developments of sea rescue and coastal defense. Here, a helicopter, unaided, dips a lone crash survivor from the sea. Under the Navy in war, the Coast Guard is now controlled by the Treasury Dept.

## THEIR CAREER...

take down a 75 mm howitzer, or a 46-ton tank, or a jet plane, or a snorkel-breathing submarine, or a sky-sweeping radarscope, or a 16-inch gunned battlewagon, and just step forth to meet the foe.

Highly technical modern fighting equipment is both vital and hard to handle. The people who man and serve these devices must be trained long and hard and well. In times of peace, especially, there will not be much glory for the folks who take on this job.

But, peace or war, there can be only gratitude in the hearts of their civilian neighbors for the diligence with which they dedicate the good years of their lives to these jobs.

Yes, the people of Chrysler Corporation are proud to tip their hats deep to those people in the enlisted ranks of the U.S. Army, Navy, Air Force, Marines, and Coast Guard.

Without them standing by, armed might would not be very mighty.

*This message about people we all like is presented by your PLYMOUTH—DODGE—DE SOTO—CHRYSLER—DODGE "JOB-RATED" TRUCK dealers, and*

### CHRYSLER CORPORATION

*Enjoy "Medallion Theatre" . . . dramatic entertainment for all the family . . . every week. CBS-TV. See local paper for time and station.*



**THIRSTY WING TANK** rapidly consumes 230 gallons as S/Sgt. Robert Dieffenderfer refuels his T-33 jet trainer at the end of a routine flight. Attached to the 5th Fighter Interceptor Squadron at McGuire Air Force Base, N.J., Crew Chief Dieffenderfer, a skilled technician at only 26, has sole responsibility for maintenance and upkeep of \$100,000 plane.



**RUGGED TRAINING** for rugged soldiers is all part of Army life, as M/Sgt. James Matthews shows two recruits the ropes at Ft. Dix, N. J. Only 29, Matthews is top sergeant over 234 men in the 60th infantry regiment. A typical career man, Matthews is married, has two children, plans to "try for 20 years, then buy a place at the shore and just fish."

**something  
to think  
about**

Peace in our time depends upon plenty of *this* sort of thing:

"We were given a map," said the man from Martin, "and a target to be destroyed. Problem was to produce the hardware—the optimum weapons system to destroy that target."

That's as far as he would go. Except to say this:

It looks like nothing ever flown by man. Pilotless. Can be launched from a pad of scorched earth. A team of Martin scientists and engineers in five branches of aeronautical engineering produced this thing in a matter of months from problem to proving ground.

Today at Martin an entirely new concept, known as Martin Systems Engineering, is resulting in the production of new aircraft, guided missiles and electronics weapons designed not as yesterday's flying vehicles but as the coordinated and controlled spaceborne systems of tomorrow.

The principle of Martin Systems Engineering now makes possible developments in airpower that may change the shape of things to come—our way!

*You'll hear more about Martin.*



**Martin**  
AIRCRAFT



**THE GLENN L. MARTIN COMPANY**  
BALTIMORE • MARYLAND

# The Month's Mail

## "Division Objective"

To the Editors:

I would very much appreciate your sending me a dozen reprints, or magazines if you have no reprints available, of the October issue story, "Division Objective" by Colonel Swift. This story is one of the finest I have ever read.

I think it should be picked up by some of the big papers. . .

M. M. JOHNSON, JR.

Olin Industries, Inc.  
New Haven, Conn.

To the Editors:

It gave me extreme pleasure to read that fine article, "Division Objective," in the October issue. Colonel Swift "hits the nail on the head" when he writes, and I quote: "What is the use of teaching a man why he fights, if he doesn't know how to fight," unquote. I can recall back in 1948, while assigned to a training division, we devoted

hours to Tl&E, character guidance, and the essential but not *more essential* subjects. However, we did not teach the use of the bayonet. In September 1950 I assumed command of a rifle company in Korea that had no bayonets. When we finally were issued bayonets it was necessary to teach my men how to use them.

I have also observed that too many chaplains bivouac in their offices and let the men come to the chaplain; the chaplain should go to the men.

We devote too many hours to classroom instruction and not enough time to field training. Leadership, individual training and discipline cannot be developed in the classroom.

CAPT. WILLIAM S. MCCUTCHEON  
Baton Rouge, La.

To the Editors:

Before proceeding to the point of this letter I would first like to explain that I am not a subscriber to your fine publication. However, I have the privilege of reading your entire JOURNAL each month, as I work for a lieutenant colonel who does get it.

Upon reading "Division Objective" by Lieutenant Colonel E. F. Swift I could no longer resist writing to you.

I have never come across a short story that moved me emotionally so completely as did "Division Objective." My sincere congratulations to Colonel Swift for being the author (for whatever they are worth to him) and more especially to you for having chosen it for publication.

PATSY JEAN MANLEY

HQ Fifth Army  
Chicago 15, Ill.

To the Editors:

As an ex-platoon leader and battalion staff officer of the 16th Infantry, 1st Infantry Division, I read with more than usual interest Colonel Swift's story in your October issue. Right off I want to warn you to start ducking the storm of brickbats which will be winged your way by irate Red-One types who will see in Colonel Swift's literary *tour de force* a slap at their old outfit.

I thought the piece was excellent and I only wish more students of war were as articulate and imaginative as Colonel Swift.

JOHN F. LOOSBROCK

Air Force Magazine  
Washington, D. C.

• Our thanks to a former *Infantry Journal* associate editor who is still loyal to the infantry.

To the Editors:

As a former infantry officer of the 1st Division, I wonder why you thought much was to be gained by publishing "Division

Objective" by Lt. Col. Eben F. Swift in your October issue. I doubt if the 1st Division was ever that dumb, and specifically I should like to ask four questions.

(1) When the whole division was in column in pursuit of the enemy, why was the Div. Recon. Co. not out in front doing the recon? What was the G2 doing? He is the staff officer for recon.

(2) Since when have infantry patrols marched up a tree lined road towards an enemy-held village?

(3) Why was there no intelligence from the MII, IPW, PI, CI, or OB teams?

(4) Why (with the G2 absent, the Recon Co. absent, and the intelligence zero) did the division commander expose himself, the regimental commander and the battalion commander, standing up on the sky line within demonstrated rifle range of a town now known to be occupied by the enemy, for "five minutes"? Any decent sergeant of the 1st Division would have yelled: "Lie down, you son of a bitch."

I am sure the officers and men of the 1st Division are not the roadbound fools Colonel Swift depicts them. Everyone who ever fought in Europe knows those evenly

(Continued on page 8)

## THIS MONTH'S JOURNAL

It was inevitable that some soldier would take exception to Colonel Swift's use of the 1st Division in his fictionalized account of how one enemy soldier stopped an American division, as told in the October JOURNAL. As it happens the objector was an old JOURNAL friend—Colonel Shipley Thomas—who also put some good questions to Colonel Swift. In this month's mail (*beginning on this page*) you'll find Colonel Thomas' letter and Colonel Swift's reply, along with other letters commenting on the article.

We are not quite certain of all the details that brought it about but we do know that we are indebted to Maj. Gen. Robert Young for Colonel Craven's story of Operation Touchdown (*page 24*). It isn't often that we get a battle narrative that describes the teamwork of the combined arms of a division as vividly as this story does.

Actually the knowledge and experience of retired general officers of the Army are used more extensively than is implied in the article by Col. Jack Jeffrey (*page 34*). For example, we know one general officer who is writing a field manual on mine warfare. Also some of them lecture quite regularly at the service schools and still others serve on official committees and boards. We are happy to use the article because Colonel Jeffrey's college dean does make some good points that should make us think. It is always helpful to catch a glimpse of how other professions view us.

## NEXT MONTH'S JOURNAL

In "On the Hill" Lieutenant Jim Kyle and Corporal Richard Smith of the 8th Field Artillery Battalion don't advocate any new tactics or techniques for forward observers, but they do tell a tingling story of life on a forward-observer team.

An anonymous "Colonel Shillelagh" hits hard in arguing that "lip service to civilian control has permitted it to be used to defend decisions and actions which it cannot justify." The sound principle of civilian control is in danger, not from the military, but from civilians who are usurping military authority, he says.

A generation ago the name of Peter B. Kyne was known from coast to coast as the author of short stories and novels that had millions of readers. During that time he contributed an occasional piece to the *Field Artillery Journal*, a magazine he had much affection for. Now he has contributed still another piece. In "The Test of Gentility" he tells an unforgettable story of our Army in the Philippines.

Many years ago—on the eve of World War II—the *Infantry Journal* published a series of articles under the heading of "Around the Bases" which described the geography, the peoples and the flora and fauna of the then new places where the U. S. Army was stationed. Since then the Army has become even more widely scattered and it seems time to have a new go at travelling "Around the Bases." The first article in the series, on Alaska, will appear next month. We have high hopes that you will like it.





**CONGO 'COPTER**—Health authorities of the Belgian Congo have won a battle against dread disease-carrying insects. Sikorsky S-51 helicopters spray insecticides on

vast breeding areas inaccessible to other aircraft or spray equipment. Leopoldville residents are reported now to be as safe from carrier insects as are New Yorkers.

## AROUND THE WORLD WITH SIKORSKY HELICOPTERS



**"DRY RUN" RESCUE**—Here a Navy HO3S Sikorsky helicopter awaits the loading of a "wounded" man carried on a stretcher improvised of poles and Navy jackets. This pickup was part of a practice operation for search and rescue helicopters and survival parties. The HO3S Sikorsky is specially equipped to carry litter patients.



**UNUSUAL CARGO**—This crashed Army L-19 liaison plane was salvaged with ease in Korea by an Army Sikorsky H-19 helicopter. Two trips were needed to fly the damaged wings, engine and fuselage (above, in cargo sling) to a repair depot. Army Sikorsky helicopters are now solving hundreds of tough, unusual transportation problems.



**SPECIAL AIRLIFT**—A wounded veteran, after months in a North Korean PW camp, is carried from an Army Sikorsky H-19 helicopter to a South Korean hospital in Seoul. As in earlier prisoner exchange activities, Army Sikorsky helicopters played a big part in the post-truce prisoner exchange, providing airlift for repatriated soldiers and other personnel.



## SIKORSKY AIRCRAFT

BRIDGEPORT, CONNECTICUT

*One of the Four Divisions of United Aircraft Corporation*

## The Month's Mail

(Continued from page 5)

spaced trees along the crowned highways are a marksman's dream.

I realize that Colonel Swift had a totally different object in mind when he wrote the article, but why he chose the famous 1st Division to be held up to ridicule and why you published it, is more than I can understand. This article does not do anything but make a laughingstock of the best division in the U. S. Army and thus tends to tear down the morale of the Army.

COL. SHIPLEY THOMAS  
Retired.

High Orchard, Pa.

● We referred Colonel Thomas' letter to Colonel Swift, who replies:

To the Editors:

In bringing up the intelligence angle of "Division Objective," Colonel Thomas has opened an extremely interesting subject, one that I am glad to discuss with him either personally over a few beers or in the pages of the JOURNAL.

First of all, we are on the same team. Although my experience in intelligence work is limited compared to his, I have spent three and a half years in intelligence assignments and share his interest in it and his belief in its importance. Furthermore, coincidentally, we were classmates at Leavenworth, where they impressed upon us—R.T.P.: Read the problem. Now, it happened even there and it has evidently happened here that some of the readers of this problem arrived at far different conclusions than the writer of the problem intended. Colonel Thomas and I are both protagonists of the 1st Division. He says it is the best division in the U.S. Army. When I was in it I thought so, too. However, at the time of this story, I can only say that it may well have been the second best division in the U.S. Army, and I am sure that farther than that no 1945 members of any other fighting division in the U.S. Army would ever go. If they did the Army would really have gone to hell in 1945 instead of to Rome, Tokyo, and Berlin where it did go.

Specifically, however, let me defend my 1st Division of the story.

As to intelligence and reconnaissance, I maintain it was damned good. General Appleton had the information that the bridges were out along the Siegnitz. He knew that the road net was good to the south but that didn't help him if he couldn't cross the river. He knew the road net was not so good to the north and that the Germans were retreating to the high ground in that vicinity. He knew that the Germans were on the run in the 18th Infantry sector and that resistance had been light along the road where the 18th was moving. He received this information from his G2, who had been an extremely busy man the past twenty-four hours—as always

in a break-through. G2 had been collecting this information by reports from his Order of Battle Teams, his photo interpreters, his interrogators of POWs, his CIC agents and his division reconnaissance company. This particular company, accompanied by reconnaissance officers from the division engineers, had detachments checking the Siegnitz, others the road net to the north and east. They, of course, had checked the roads east and west of Grosheim, but they had learned through bitter experience not to barge through those little German towns, which with their narrow, winding streets and their heavy, stone buildings, were ideal sites for ambushes, particularly of thin-skinned vehicles with which Division Reconnaissance was equipped. They may have left their vehicles in concealment, sent a foot patrol into Grosheim, and reported finding a few Germans there, but that was twenty-four hours before George Company's point arrived, and that information was as cold as a cucumber by the time Corporal Rivera was shot. Since, however, the division was moving so fast, the detachment from the Recon Co had simply bypassed Grosheim and gone about their business of long-range reconnaissance at a distance of about one day's march from the forward elements. In short, it was operating exactly as it should have operated, but it did not furnish complete information of the situation at Grosheim as of 1400 26 April 1945 and neither the CG or the Division G2 expected it to.

G2 knew that his reports from his intelligence teams would take time to collect, collate, evaluate, and disseminate. In view of the fast-moving situation, he knew that most of his "hot" information would be coming from not only his Recon Co. but also the regimental I and R platoons and especially from the forward elements—in this case, good old George Company. The reports from George Company left nothing to be desired until 1400 26 April, when for a while the splendid intelligence net that had been set up got a little confused. G2, instead of confusing the situation further by sending frantic requests for information to the 18th Infantry, went calmly about his business and waited for the situation to develop. Meanwhile, he prepared his intelligence estimates, and planned his intelligence annex for the attack order he knew was coming, leaving space for late patrol reports when they came in. When the town was taken, his estimates proved to be amazingly accurate. I say he was doing his job and doing it well.

However, if he were the omniscient individual that Col. Thomas seems to think he should have been, and had determined immediately that the Germans intended to defend Grosheim and had their positions all pin-pointed, their strength, types of weapons, and unit designations definitely confirmed and established, and all this disseminated to the forward elements in a matter of minutes, he certainly would have been a great G2. But even then, he would

not have been able to save the division all the time and the casualties it took to take its objective unless he had by some occult power determined that the key to the German defense of Grosheim was Private Mueller, and just where Private Mueller was and what he was doing at 1400 26 April. Furthermore, if he had told his CG that one man had the capability of stopping the 1st for twenty-four hours, a capability which I still believe was entirely possible in this situation, the General would probably have had his G2 committed to the psycho ward. So, if I have held the 1st Division up for ridicule in this story, please do not blame my G2 or his agencies. I claim they did all that could be expected of them—and more.

As for George Company's advance down the tree-lined road, I would like to know if there was any infantry outfit, in Europe or anywhere else, contact with the enemy having been temporarily broken, that did not advance in a double column, one on each side of the road, as George Company did. If they had snooped and peeped their way clear across the European countryside under these conditions, they would be there yet. George was not roadbound after that first shot was fired, but if it had not moved along the roads when it could, it would have been stupid. Remember, also, George Company had moved and moved fast, for several hours and several miles before it was driven off that road. Now, if all the infantry outfits had decided to abandon the roads and advance across country, a time-consuming maneuver, but one which I admit is sometimes necessary, who was going to clear the roads for the artillery and the division trains? I know of no better way to lose vehicles than to allow them to advance down a road not previously cleared by infantry. And after the loss of those vehicles somebody is going to yell loudly for some infantry outfit to reduce the roadblock, anyway, so they might as well clear it in the first place.

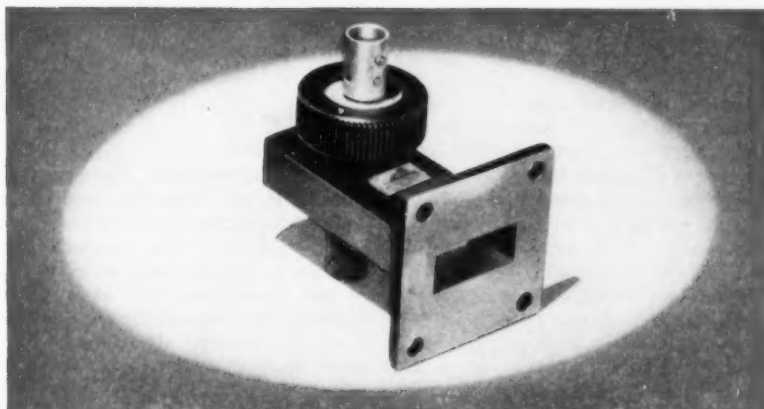
As for General Appleton's decision to advance in a column of regiments down the road, I have already explained his reasons for this—speed. He knew the Germans were ugly customers when they had time to get set, but if he knifed through on a narrow front and fanned out in their rear area, a lot of Germans would know they had been licked, and when the German knows he is licked he gives up. The division was delayed twenty-four hours, but his information of the situation indicated that he would have lost at least that much time in constructing bridges to the south or in attempting to move through the highly defensible high ground to the north. I claim my division commander was justified in his decision, but I realize I am a little presumptuous to set myself up as an authority on how to run a division. I would appreciate it if any experienced division commanding reader, past or present, would come to my rescue on this, or straighten me out if I'm wrong.



# New X-Band Test Equipment

ADDITIONAL INSTRUMENTS

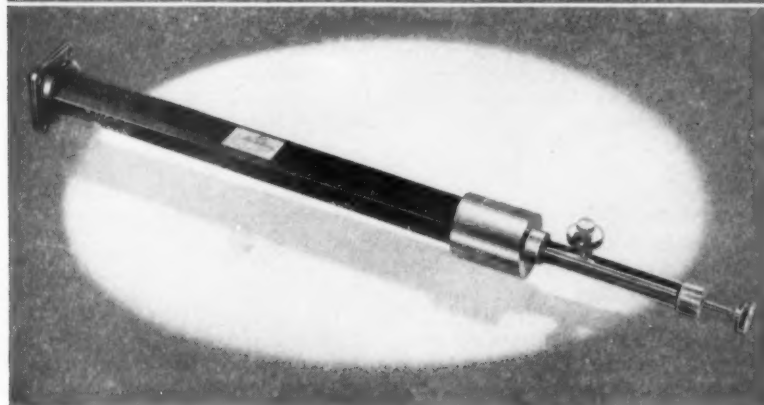
ADDED TO MICROLINE\*



## Model 219C Waveguide Thermistor Mount

This instrument is used in conjunction with accessory equipment to measure and monitor microwave power at average power levels as low as 10 microwatts. It is particularly useful in the measurement of pulsed power. This thermistor mount is recommended for use with the Microline Model 123B Wattmeter Bridge.

Frequency Range	8.5 - 9.6 kmc.
Maximum VSWR	1.5
Operating Resistance	135 ohms
Maximum Power	
Rating	10 mw.
Waveguide Size	RG-52/U (1" x 1/2")



## Model 495 Adjustable Termination

This instrument is specially adapted for use in precise microwave measurements where the quality of excellent impedance matching over a broad band is essential. The design of Model 495 provides for independent control of phase and amplitude of the reflection coefficient of the load. It is particularly useful in applications requiring a termination of minimum power reflection, a movable termination where the reflection from the termination can cause error in measurements, or as a means of matching low standing wave ratios to obtain the smallest possible reflections.

Frequency Range	8.1 - 12.4 kmc.
VSWR Range	1.005 - 1.15
Phase Variation	360°
Waveguide Size	RG-52/U (1" x 1/2")
Power Rating	5w.

Our nearest district office will be glad to supply complete information upon request.

© U. S. PAT. OFF.

## OTHER X-BAND MICROLINE INSTRUMENTS

MODEL	INSTRUMENT
• 167A, 486A	• Adapter
• 377	• Adjustable Short
• 173, 174, 183	• Attenuator
• 152A, 134A	• Barretter Mount
• 184	• Waveguide Bends
• 170, 171	• Detecting Section
• 360A	• Directional Coupler
• 234, 235, 236	• Frequency Meter
• 126, 273	• Impedance Meter
• 145	• Mixer
• 379	• Waveguide Tee
• 165A, 166A	• Magic Tee
• 406	• Termination
• 150, 246	• Transformer
• 146, 178	

# SPERRY

## GYROSCOPE COMPANY

DIVISION OF THE SPERRY CORPORATION

GREAT NECK, NEW YORK • LOS ANGELES • SAN FRANCISCO • SEATTLE • CLEVELAND • NEW ORLEANS • BROOKLYN  
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I am perfectly willing to agree that General Appleton was wrong in exposing himself at the battalion OP as the General himself admitted. General Washington had a few horses shot out from under him while campaigning with Braddock; General Lee was ordered to the rear by his men in the Wilderness. More recently General Buckner was killed at an OP on Okinawa, and an incident of which I have more direct knowledge, General MacArthur strolled unconcerned around a sniper-infested area in the vicinity of the small village, San Manuel, on Luzon in 1945, but nobody seems to have criticized their ability or competence as commanders for these errors. Generals have conferred at OPs nearer than 500 meters from the enemy before without being shot. I can remember at least one occasion in which I conferred with a general at my own battalion OP under these circumstances. I hope they continue to do so. If this be dumbness then we have a lot of dumb generals who have reputations of being otherwise. I am inclined to admire such generals rather than condemn them.

I hope this answers Colonel Thomas' questions. I believe they could have possibly been answered more to his satisfaction by some straight talking over those beers because both questions and answers seem to be more blunt when they appear in print, but maybe some day we will have that opportunity to talk it over. If he can convince me that the 1st Division G2 had

complete and accurate information about every town it went through, that it moved as fast and as far across country as it did along the roads, that its commanders were always effective but never exposed themselves, I'll admit that the 1st Division was by far the best in the U.S. Army in 1945—better than mine. On the other hand if I can't convince him that I have not made the 1st Division the object of ridicule in "Division Objective" I'll buy those beers.

LT. COL. EBEN F. SWIFT  
Fort Benning, Ga.

### Impressed

To the Editors:

This seems like an appropriate time to mention how much I have become impressed with the COMBAT FORCES JOURNAL, copies of which have only recently been brought to my attention.

Could you forward a copy of your July, 1953 issue, which seemed particularly good, and bill me for same?

In any case, I'd like to suggest that you feel free to forward press releases, advance issues or any other material you feel you'd like us to publicize so that we might join you in drawing public attention to the JOURNAL and demonstrating how great it really is.

Again with congratulations for a wonderful job.

WILLIAM DONALD McMAHON  
WCAU Television  
Philadelphia 31, Pa.

### Experience

To the Editors:

Some of the best articles and comments on articles that I've ever read are those published in COMBAT FORCES JOURNAL, and often after reading them, I wish I could congratulate the writers of the same. The one by General Lynch on "Where is the Regimental Commander?" and "Give Us Back Our Pride" are only two that should be read by everyone wearing the uniform. That goes for the last two paragraphs of comments by Major General Butler B. Miltonberger, in the October issue.

But if there is one man who knows his Army, and hits the nail on the head when it comes to expressing himself, it's Major Charles S. Stough, Jr., Coronado, California, who certainly knows what is wrong with this Army of today. His comments in the October issue should be framed and presented to General Ridgway and General Young.

It's clear that a high rate of pay will not keep either an officer or enlisted man in the service. Nor will rapid promotion hold good men, or men with a lot of service, and rank. If pay and promotion are not what's wrong with the Army then what is? The trouble lies in youth and inexperience, at all levels of command. It takes seasoned leadership, and since 1942 no man has held a rank or grade long enough to qualify as a seasoned and experienced leader in one grade before he

was promoted to a higher grade. The worst part of the whole situation is that few have made any effort to qualify themselves to fit into the higher rank once they got it. Attending all the high level service schools or civilian institutions of learning adds to one's value in the service, but it never takes the place of experience.

I hope we hear from others who have given this subject serious consideration, for articles like Major Stough's should be a great help to the parties charged with finding a solution to our problems.

LT. COL. P. L. RODGERS  
Denver Finance Office  
Denver 2, Colo.

### Correction

To the Editors:

I have read my article, "Economical Fire Power," in the November issue and unfortunately an error crept into it.

It should read: "The magnitude of the problem is apparent when we are told that in two months the 10th Field Artillery Battalion, 3d Infantry Division fired more than one hundred thousand rounds of ammunition valued at four and one-half million dollars!", instead of "one million rounds."

Any artilleryman will realize that one battalion could not fire a million rounds in two months.

MAJ. MASON J. YOUNG, JR.  
Dept. of Tactics  
U. S. Military Academy  
West Point, New York  
● It was a slip in typing that the editors and proofreaders missed. Sorry.

### Communications

To the Editors:

The Cerebration by Colonel Kintner in September suggests what he considers a new idea; namely, that a Signal Corps unit be given responsibility for interior communications within an infantry regiment down to and including company headquarters. But it isn't new; in World War I, each division had its "Field Signal Battalion," which was charged with the very tasks he enumerates. Apparently the War Department found that experience did not bear out the merits of Colonel Kintner's solution.

The casualty rate in Field Signal Battalions was unduly high, because, I am told, infantry commanders considered signal personnel as expendable as the dry batteries in a field telephone.

The Infantry tells the Signal Corps what it wants in the way of communications equipment. Once that equipment is designed, produced, and turned over to the Infantry, Signal Corps technicians are no more required to operate it than are Ordnance Corps personnel needed to operate the more complex weapons of modern infantrymen. Communications is a weapon so why not teach all infantrymen how to use it? Every infantryman should be taught the field wire splice; know how to connect

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an ordinary field telephone to a field wire line; and learn the simple basic voice procedures for radiotelephone work. On top of that, proper care of communications equipment must be taught to every last man in the regiment. I still remember the SCR-536 handie-talkie used by a Doughboy to pound tent-pegs into the ground!

In regard to maintenance of signal equipment, I'll go right along with Colonel Kintner—as far as regimental level. The division signal officer and his maintenance officer could then assume the responsibility for keeping working the communications equipment of infantry and artillery users. The infantry communications officer would no longer be expected to be a technical supervisor, but would be responsible for operations only.

GEORGE H. GOLDSTONE  
Detroit 26, Mich.

#### Thanks

To the Editors:

Enclosed is \$5 for another year of good publishing and timely coverage of my job and the jobs of others.

Your magazine has improved to a much better place since you've taken the advice of many of your readers.

But you know, in all the time I have seen your magazine, you have flirted around the engineers. Let's see an article about the combat engineers and some good material

on new models of bridges, explosives, demolition parties, truck and truck maintenance, road and road maintenance, amphibious landings, mines, mine laying patterns, new engineer bridges, designs, on air fields, and a complete coverage of engineers in combat.

PFC. JOHN HAMMERSLEY  
Fort Belvoir, Va.

● We're looking for just such material but it must also be of interest to non-engineers.

#### 37th Division

To the Editors:

Since the end of World War II, the 37th Division Veterans Association has been trying to locate the next of kin of men killed in action who served with the 37th Division, so that we may furnish them with a history of the Division.

We would appreciate it if you would publish this fact and our address.

FRANK P. WALKER  
37th Division Veterans Association  
5620 Brindest Ave.  
Dayton 9, Ohio

#### "Fish or Cut Bait"

To the Editors:

Colonel Cocklin's article, "Fish or Cut Bait," in the August JOURNAL and the comments it aroused have served an admirable purpose in bringing out into the open a major intra-service controversy.

The letters of the various adjutants general and individual Guardsmen indicate, I think, how solidly the Guard as a whole stands behind the Colonel's viewpoint.

It is most unfortunate that the lone letter of criticism should have started out by charging the JOURNAL with bias. The article was phrased unmistakably as an expression of personal opinion. How anyone could interpret that as an expression of JOURNAL policy or a misuse by Colonel Cocklin of his editorial position is a mystery to me.

Regardless of the context of the article, the important point is whether the statements, charges and recommendations contained in it are true or false, useful or worthless.

Colonel Cocklin's critic gives us no satisfaction in this regard.

There is no better method known to human experience of "tearing someone else down" than the use of a vague, whispered charge, hinting that something dark and sinister lies in the other fellow's closet.

If there are "truthful statistics" that can prove the National Guard is not what it claims to be, then let's get them into print where we can all look at them. If the National Guard is leading the people of this nation astray by claiming to be something it isn't then let's do something about it before the rascals grab another dollar of appropriations.

I do not believe that those "statistics" exist. I believe that Colonel Cocklin spoke the truth and that the poverty of the arguments used against him proves it.

LT. WILLIAM V. KENNEDY  
ANG

Limestone Air Force Base  
Limestone, Me.

#### Commissaries

To the Editors:

It is time someone nailed the retailers' lobby for that thinly veiled threat to oppose a GI pay raise unless they shut their mouths about the destroying of the PX and commissary.

Everyone has been too polite. Instead of yelling, "Let me fill my pockets first, and I won't oppose a GI pay raise," this retailers' federation should levy on its members to build a store on every military establishment, fill it with furniture, fixtures, and clerks, and sell everything from razor blades to automobiles to the soldier, his widow and other survivors.


There is no obligation for the soldier to fight and die unless there exists a corresponding obligation on the American people in their turn to back him with whatever is necessary: their profits, comforts, and lives if necessary.

Right now most of the American people just don't give a damn—beyond giving the soldier or his survivors a medal and a lot of windy praise.

CAPT. EUGENE R. GUILD  
Retired  
Glenwood Springs, Colo.

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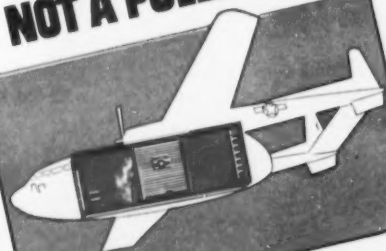
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## The Month's Pictures

**Eighth Army stays on its toes.** The cease fire in Korea was the signal for a vigorous training program—along and behind the post-armistice defense line. Here Company M, 7th Infantry, is refreshed in the operation of the 75mm recoilless rifle.

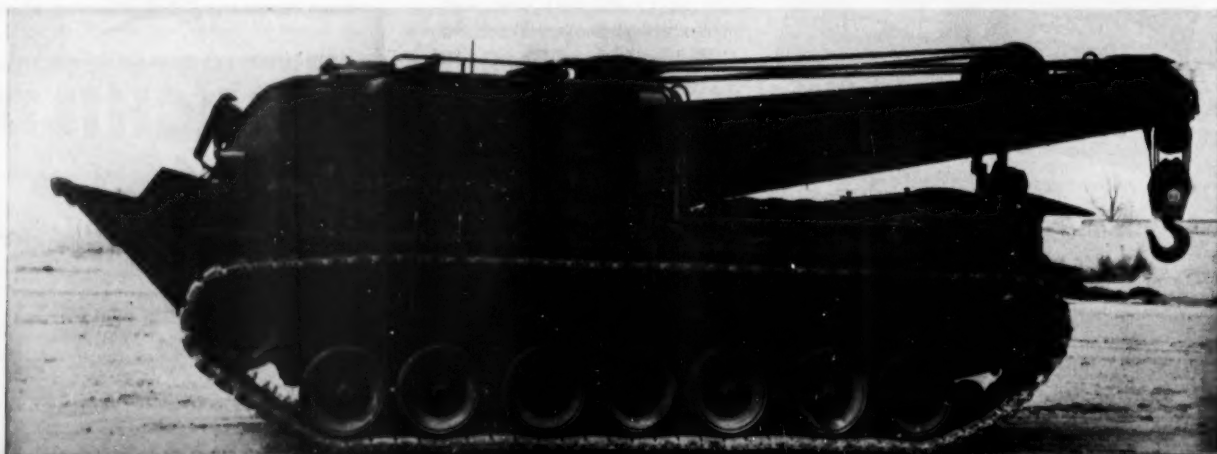


**Soldier of the Month.** Maj. Gen. Kenneth D. Nichols took off his uniform to become General Manager of the Atomic Energy Commission. General Nichols has been one of the Army's best informed atomic energy experts.



**Berlin horse-platoon.** The Army's only mounted military police platoon is on duty in Berlin where it guards the American-Soviet border and is prepared to put down Communist-inspired demonstrations.

**Vehicle of the Month.** The Army's newest recovery vehicle—the T-51—consists of an M-48 tank body carrying a power boom that can lift thirty tons. It was designed so that a tank crew under fire can be rescued along with the tank. It is powered by a 1000-hp Ordnance-Continental air-cooled motor.







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### U. S. ARMY COMBAT FORCES JOURNAL

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December 1953

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COMBAT FORCES JOURNAL

UNITED STATES ARMY  
THE CHIEF OF STAFF

October 23, 1953

Lieutenant General G. H. Decker  
President, Association of the U. S. Army  
1529 Eighteenth Street, N. W.  
Washington 6, D. C.

Dear General Decker:

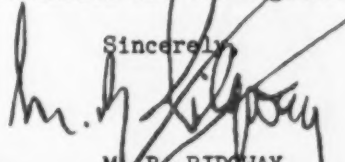
The demands on my time in these early months of my duty as Chief of Staff have prevented my expressing to you and to the Executive Council of the Association my personal views on the importance of the work in which the Association is engaged and notably the publication of its professional military magazine -- the Combat Forces Journal.

As you know, I have been a member and supporter of the Association for many years. I look forward to receiving each issue of the Journal because I find it to be stimulating to thought and exceedingly informative. As a meeting place of the minds of all our officers -- Regular, National Guard, and Reserve -- it performs unique and useful functions that can be performed by no other agency, official or unofficial.

As a military magazine dedicated to the advancement of our profession, the Combat Forces Journal deserves the fullest support of all of us. We should all be conscious that the Journal's opportunities for service are limited only by the support we give it.

The Executive Council and the staff are to be congratulated for their continuing efforts to maintain the high standards which make the Journal respected all over the world. You can be assured that I shall always support the Association and the magazine.

Sincerely,

  
M. B. RIDGWAY  
General, United States Army  
Chief of Staff



**MAKE IT LOOK REAL  
AND YOU, TOO, CAN**

# BLOW UP

**LIEUTENANT COLONEL**

**ROBERT B. RIGG**

I HAD hardly intended to blow a tree down on my squadron commander, but the one tree he chose for cover was loaded with TNT and the five-minute fuze was burning when I decided it was better to take the consequences than to interrupt the realism of my problem. Results count! My commander was not happy over the immediate result of the TNT in a treetop, but he raked me over the coals because my sewer-pipe mortars (w/TNT charge and gravel output) blew apart, scattering real metal and endangering men. His words were always encouraging when there was more realism; discouraging when I exceeded the bounds of safety.

My mortars were creations out of Li'l Abner: Iron pipe with sturdy metal caps screwed in the bottom and wooden base plates. The TNT charges were chipped off half-pound blocks with a hatchet. The system was simple. We loaded them by dropping in the fuze-lighted TNT charge (15 seconds delay), poured in a pail of gravel "grape shot"—and sought cover. "Whoosh" and the stuff was "on the way" for a good seventy-five yards of realism. There was just one gimmick not tested to full extent: while we had gravel-pit tested the makeshift mortars, we had not contemplated metal crystallization!

But flying crystallized sewer pipe was not all that frightened officers and men that night. When the opposing forces came down the military crest of a big hill, the entire hillside was lit up with fire. From a ravine my men spread long strip paths of gasoline-soaked straw as



LIEUTENANT COLONEL ROBERT B. RIGG, Armor, a regular contributor to these columns, is now on duty in Germany.

**COMBAT FORCES JOURNAL**

Play it like Hollywood . . . let your imagination run riot and your ingenuity work overtime . . . your training will be livelier and your men will learn more

# PLAY YOUR COMMANDER

they withdrew. Then they waited for the enemy to appear, and when he did, they lit the straw strips and the flames raced uphill to light up the enemy while my machine guns and mortars on the opposite slope had a field night "shooting" up the illuminated figures. The umpires assessed forty percent "enemy" casualties but later restored all "enemy" troops to the problem. As the enemy entered the ravine we lit smoke pots, and from the coughing we could pick up every patrol. We then set off TNT charges in the hill cliffs and small ravines, blasting sand and gravel down upon the "enemy" as we gradually gave ground toward our fortified area. There I had all the treetops TNT charged to simulate artillery fire (the fire that blasted my commander). The fortified area was a nightmare of real combat surprises.

This was a realistic training problem. It didn't require much terrain space but it did take preparation. It paid in results.

Since that night in 1942 I have conducted many combat-realistic, small-unit problems, and it is my purpose here to suggest some useful and practical ideas on the subject. These ideas take a little troop labor, they do not require large areas, and they are easy to use.

## Play it like Hollywood

To conduct realistic training an officer must place himself in the position of a movie script writer and Hollywood director. He must dream up props, situations, cast his Aggressors properly, build his training "set" to embrace at least the false fronts of realism and stage-manage his problem throughout. He'll need a checklist for props, explosives, and such, and another one for sequence of events: a plan of problem organization in order to achieve the training objective. He'll also need assistant directors, call them umpires. His Aggressors, the important part of the cast, may need to rehearse. It is better to spend two days preparing

a realistic exercise and one day conducting it than to rush through unrealistic exercises.

## Appeal to the Senses

Use plenty of smoke to appeal to the sense of smell. Throw in all the noise you can. Load your problem with wire and obstacles to give men the touch of war. You might appeal to taste by issuing a certain type of rations, but the best method is to encourage soldiers to capture a kitchen so as to get some extra chow and hot coffee. I have found that an attack or offensive problem goes faster when the attacker's kitchen truck is a top priority objective. I recall how some raiders caught a tank company with its guard down one night. The raiders got inside the perimeter and made straight for the kitchen which served them coffee at midnight. The raiders then departed to raise hell within the bivouac. Appeal to sight must be achieved by using sizeable Aggressor units—not just a few posted men. Give your troops a real maneuver enemy, and try to make the landscape alive with props of combat. Make everything grim. As in Hollywood: "This is IT, men!"

## Challenge their Minds

I like the "What would you do?"

Action on the Riggfried line at Fort Knox. This fortified line was made with scrap materials. Old tank hulls are on fire, to simulate the grimness of combat.



type of training for perfecting crew or individual techniques. Set up a series of situations in a county fair or proficiency test sequence. Then "production line" your men, individually or in crews or squads, through the course. It may take you a day or even a week to set up some realistic situations, but when you pass your men through them you will at least have provoked their thinking and gained some idea about their state of training and general quality.

## Intelligence and Scouting

Make a dummy. Attach a borrowed parachute and unfurl it—or use rope and target cloth for the parachute.

Booby-trap another dummy and put a few worthwhile intelligence documents in its clothes.

A wrecked enemy vehicle. Use one of your own and take a wheel or track off. Scatter a few bodies and bury a few "unexploded" mines in a regular pattern. Two bottles of ketchup will supply the blood for the dummies.

A crashed airplane. The rear end of a fuselage will do. Two men can make one in four days. Scatter debris about. Set some of it afire and use a smoke pot.

"Bloody up" three of your men and dress them as guerrillas. Let them wait at the bend of a road and offer to surrender for food and medical aid.

Construct an Asiatic type bunker or CP. Make it interesting outside and in, with the debris of a quickly departing enemy scattered about: chopsticks, documents, broken crockery, some old

clothing, smashed ammo cases with enemy markings.

Now send your men out as individual scouts, giving them a reconnoitering mission. The "What would you do" element can be tested by having each soldier write a descriptive message on a field message blank and on the back of it describe his actions. Not only will this test his message-writing ability, but his intelligence and overall training, common sense, and practical application. Does he search the exhibits for information? Does he exercise caution and search for booby traps? Is he prepared for ambush? Does he look for or report mines? Does he report accurately?

#### **Vehicle Drivers**

Such situations as these along a short stretch of road, can exemplify future combat troubles:

Oil barrels and gas cans in barricade. Booby-trap a few to explode minor charges when moved.

A mine field in a regular pattern followed by another in an irregular pattern. Make a third one and booby-trap some of the mines (TNT blocks set to explode several yards ahead) with pull igniters to explode when lifted out. Work for variety in obstacles.

A burning ammunition truck blocks the road. Its driver lies dead beside the road. This situation can be made by placing a smoke pot in the truck bed. Stack and brace your empty ammo boxes so as to give the truck the appearance of a full load. Place the smoke pot in a box of wet sand because it gets hot. Let your men act in this situation, not just answer what they would do. A few M-8 firecrackers near the smoke pot can add to the tension.

A badly ditched mess truck or other vehicle can create another situation. How to extract it?

A road block with an Aggressor-manned ambush alongside will test and teach drivers to grip a gun as well as a wheel.

Place an umpire-observer near each exhibit.

#### **Infantry Squads**

You can develop a variety of situations as regards weapons, tactics and terrain. For example:

Lay out a machine gun or mortar and disarrange the sights, ammunition, MG headspacing, firing position, and such and then pose the problem of "what would you do to fire this weapon on such and such target?"

A variety of slit trenches and foxholes can give you material for such queries

as "Which one would you jump into if you saw the fireball of an atomic bomb?" (the deepest one, naturally). "Which one would you use to fire a BAR from at that [specify] target?" "Which one would you choose to be in if a tank came at you?"

Station twelve men at 300 yards and



Booby-trap the "Coke"

have them fire and move about, in some cover and concealment, then ask the squad you are test-training to estimate the size of the "enemy." This test can be repeated in a variety of ways and is very productive. It is hard to estimate enemy strength at all accurately.

An enemy supply dump of old ammo cases, gas cans, and miscellaneous items can offer interest and variety of questions (or action if defended by Aggressors). Booby-trap some "souvenirs" like candy bars, and a case of Coke!

Mortar crews, when they cannot fire live ammo, get a dull workout on small-unit maneuvers. They set up, sight, and go through the motions of firing—but no boom! Try using TNT or grenade simulators on the target. What you need is a telephone line from your crew to your target where one NCO "umpire" can toss out the exploding shells (TNT) after receiving word over the field telephone that the mortars are firing. The NCO can start "short" of the target and the mortar can "adjust."

#### **Tanker Training**

A tank company commander can get in some good tank-infantry training even where infantry is not available. He can dismount one platoon of tankers and let them act as infantry, rotating the dismounted job among platoons. Of course, this "infantry" does not have weapons organic to real infantry, but this substitute combination can teach elementary coordination and work out problems of where tanks lead versus where infantry leads, or where infantry is used as a base of fire.

A lot of fighting and slugging can take place in a boxing ring and that area is anything but large. Where you

only have a capsule of terrain you can still train tank crews effectively. Separate two platoons in opposite corners of your area. Sound the gong and let them come out slugging, with blanks in main guns. Score them on which tanks fire first, the time element between return fire, are turrets aiming the guns properly, which side mounts attack piecemeal [wrong] or in unison, which maneuvers best and shoots faster.

Tank-versus-tank situations are simple to arrange and you can use raw TNT in large quantities.

Arrange a good infantry ambush for tanks. Tankers need training in how to extricate themselves from such. Throw up some real log-and-dirt obstacles and see if your tankers have the will and skill to smash over, through or around one. Men in armor plate must learn to smash and dash. Tank drivers should not be timid or unskilled men when it comes to obstacles. Don't be afraid to let them knock over trees or smash through a dummy building now and then.

Tankers should end up in a position where they have to select alternate positions and make range cards. Concentrate on good range cards and enliven the situation with explosive charges that will actually show impact of fire.

While commanding the 15th Constabulary Squadron last year I lacked blank ammunition for the 37mm guns in the M8 armored cars. However, I had the car commanders carry rifles so as to launch flares and star cluster pyrotechnics horizontally, thereby marking main-gun fire. There was some risk. A crewman might have been hit—but it served to make them operate buttoned up. Knowledge of when a particular weapon fires is an essential in deciding who knocks out whom. Local tactical issues may rest heavily on this factor. Umpires find it hard to hear caliber .50 machine guns. Therefore, I like the use of pyrotechnics to mark main-gun fire. I still use it for 3.5-inch rocket launcher fire. The range is almost real too!

With tankers you can use a combination of exhibits and situations but toss in a hostile tank or two and measure crew reaction and action re quickness of return fire and maneuver.

#### **Catch 'em and Keep 'em**

The prisoner made to take off his shoes and walk home isn't going to get captured again if he can help it. He learns a lesson. Efforts should be made to capture PWs on small-unit problems and maneuvers and they should be held for a good period—not quickly released.



It takes skill to get in close tactically and grab a batch of PWs and it promotes aggressiveness and self-confidence to let soldiers do this. There is often an argument as to who captured whom, and here an umpire is needed. But I have found that where umpires are not present the wills of the more aggressive men prevail. Some men learn that others more persuasive or authoritarian (command voices often prevail) can win the local issue. Both sides learn, although tempers may flare. Soldiers who get mad at their opponents in an exercise develop real aggressiveness.

Captors learn lessons too, especially if they get careless, for they are often ambushed. Captors too often drop their guard amid the intoxication of local success. They also stand to learn how to move their PWs away quickly. Aggressive PWs who manage to escape (and they should try) give lessons to remember.

#### **Gimmicks of the Trade**

Once in a while I find imaginative umpires. Most of the time they are a dull sort given to pessimism and ill decisions (for your side!). This summer I was projecting an armored reconnaissance company through its annual tactical test and the company was advancing rapidly on a basis of fine aggressiveness and audacious assault. My C Company, commanded by Lieutenant Paul Ache, was "mixing" the tactical problem and pushing the Aggressors all around when the umpires began pulling rabbits out of the hat. I suppose it was realism in a sense but actually it was a control measure. I'll never forget the umpires digging into their map cases and

pulling out red paper "land mines" the size of cocktail napkins and scattering them about with much abandon in a high wind while my men were chasing the mines so as to stab them with bayonets and pin them to the ground. When we pinioned them and subsequently removed them properly, the umpires "blew a crater" in a defile. There was only one thing lacking—realism. I recommend that all umpires carry flour sacks with which to outline blown craters so that fill-in engineers and other troops can estimate the cubic feet of soil necessary to fill the holes.

Men seek and adhere to tangibles!

There is one place I like an umpire to be mean and arbitrary and that is around a mess. Here an umpire can teach realism. Overconcentrate a tactical mess, and I say let the umpire arbitrarily assess casualties after letting go a smoke pot to simulate artillery fire. The same thing goes for an overcrowded road intersection.

An imaginative umpire has been known to collect a small horde of infantry from one side and then send it forth voluntarily to surrender just to see what the startled commander on the other side would do. There is nothing like upsetting the equilibrium of a commander with a large batch of PWs.

It is well for an umpire to tag a fair portion of a unit as casualties and then see how the rest fight. Men must reckon with casualties.

#### **Cause Casualties**

It makes men remember their mistakes when you take out a squad leader, tank commander or platoon commander

and force leadership on subordinates. I have applied this to where corporals have commanded platoons for short periods. It makes subordinates appreciate that they might have to assume greater responsibilities and it acquaints them with the burdens of higher command.

To simulate "casualties" before a prepared position, string strong wire twelve inches off the ground. Crisscross it well at various angles and string tight. Men in the assault will drop like flies and squad leaders will actually see their men fall, if they don't too!

To simulate realistic artillery fire set TNT or other explosive charges high in trees and on the ground. Those placed in trees can be lit by pull igniters with long fuzes or fired electrically. It takes a little work but it's well worth it.

Land mines can be created in a variety of ways: by light explosive charges buried in the ground; by log sections sawed off, painted, and tied into real charges three yards ahead.

You don't have to rob your mess to make flour hand grenades. You are authorized to draw separate amounts of flour and sacks with which to make these and they leave no doubt as to hits on man or vehicle. Just don't put rocks in them. Night patrols that want to get into bivouacs and mark vehicles they destroy find shoe polish cans full of yellow paint are useful. It gives the other side something to work on afterward and remember!

#### **Build a Battlefield**

Every military post should have a tailor-made battlefield as a permanent



installation. Here's how. Collect some old tanks, halftracks or other wrecked and obsolete vehicles—civilian vehicles can be used, so raid a junk yard. Scatter the wrecks into a ruined column in order to create a shot-up convoy. Your men will learn by sight, not by words, that a nasty mess results from a closed column in combat.

Collect all available debris and scatter it over the battlefield. Don't be timid or selective; the more grotesque, awful and repulsive the debris the finer for realism. Old shacks, houses, shoes, wrecked airplanes, railway cars, bones, broken glass, rusty metal, shell cases, clothing—debris of any sort will do. Just get it. Then scatter it to make the region grim.

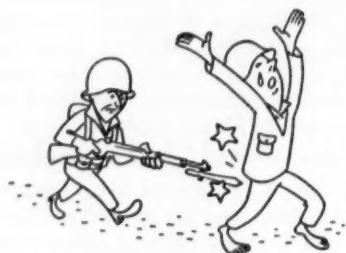
You must have a village, even if you have to build it. Go Hollywood and build a false front set of two-sided houses, at least. Make it complete with clotheslines, lamp posts, telephone poles and wire, street signs, billboards, fences and old wagons. Shell boxes make nice big "bricks" with which to construct houses. Raid the salvage dump for old plumbing, scrap metal, old stoves, etc., with which to equip your houses. They must have all elements of realism and not be mere shells. They must have the "lived in once" look. Build your village so that it looks ruined in parts. Then reserve other portions to be ruined by fire and explosives as you train. Pile as much lumber into your village as possible—if you can't build with it you can burn it up during problems. Men must get used to fighting through burning villages.

You have built a village and have the battered wreck of a convoy, too. What else do you need? Hostile defenses, of course, so construct a fortified area—pillboxes, multiple bands of barbed wire fences, dragon teeth, fallen trees, dugouts, mine fields and all conceivable obstructions. Blast and blow up the ground to create shell holes. Dig trenches and tank traps. Make it a real, formidable barrier; make it nasty. Whether you are training armor or infantry you will establish some nasty roadblocks, for all troops will need to learn how to reduce them. Scatter a few old tanks or vehicles near these roadblocks as symbols of war and ruin.

Arrange your area to fit the ground and your training needs. Load your area with props and build your atmosphere up to appeal to the senses. The medics will scream and torment you with sanitary reports, but don't be afraid to scatter some old animal carcasses around your area—and let them rot! Realism is an ap-

peal to the senses of sight, smell, touch, taste and hearing.

Dummies lend atmosphere and are easy to make. Get old clothing and stuff it with newspapers or straw, and the like—the more of these the better. Strew them about. Hang them on barbed wire. Let them drape out of wrecked



Walk PW's barefoot

vehicles. Create an atmosphere of death. That is what the soldier must work amidst.

Collect some truck loads of old rubber tires, shell cases, and ammo boxes. The day before your problem comes off load this inflammable debris into your ruined tanks, vehicles, buildings and landscape. Then before your problem starts set everything afire and let the flames pour out the grim realism of death and destruction.

Once you have your combat scenery created you can plan and project multiple problems over your battlefield. You can have your village defended and your fortified area manned. You should load up your area with explosives and mines. Let your men actually breach barbed wire with those nice-sounding and highly effective bangalore torpedoes. We did this recently in the 6th Armored Cavalry Regiment. Our only "casualty" was a German civilian who for no purpose except curiosity got too close. He was a casualty only in the sense that an explosion cracked the upper plate to his false teeth!

**Training for cameramen, too.** A daring Signal Corps lens snapper crawled up close to get this picture of a tank (left) that had just smashed through one of the houses in Colonel Rigg's village built by the 1st Battalion, 6th Armored Cavalry Regiment, in Germany.



## Intelligence

Teach and test proper location of enemy strength. You can talk intelligence until you are blue in the face—and get nowhere. But in the field you can teach the value of it to a platoon or company. Set up one Aggressor site in a defensive position. On a map or aerial photo chart the gun and defensive positions. Require the other side to scout out and determine the strength and exact locations of the defenders on the same map. Make the commander of the attacking side record this information completely and do not let him attack until he has very good knowledge of the defenders. He may "champ at the bit" but as umpire or controller your map or photo will show exact defender positions and strength. Check the attacking commander's map against yours. Later use both maps in a critique. The facts of actual positions may be in contrast to the combat intelligence gathered. It's a good exercise for one day or less.

## Ideas for the Future

Some day a smart staff officer with power in the Pentagon should invent and then sell to the Army wax or rubber "bullets" that can be fired by rifles, carbines and caliber .30 machine guns for a distance of 300 yards. These could be used on all exercises and maneuvers, and fired by soldiers at soldiers, all of whom are wearing protective goggles. There will be some faces slightly scarred, some clothing punctured, but soldiers will, at the cost of minor scratches, learn things which will later save their dog tags from being separated.

There is a serious ammunition shortage in the Army that Congress didn't discover. It is blank ammunition in all calibers. It deserves serious attention, for the tactical training of all our troops is suffering greatly from this deficiency.

For effective training we need more blank ammo and more realism in our problems and exercises.

# THE AVIATION COMPANY: to be or not to be?

**Captain Weyman S. Carver**

**W**HAT has happened to the two observation planes and two pilots I used to have? Where are my aircraft mechanics? In fact, what has happened to my battalion aviation section?"

At times division artillery commanders have decided that their units' combat effectiveness would be increased by pooling the aircraft of the artillery battalions in their command. Battalion commanders began asking these questions. And now up at division artillery headquarters, the division artillery commander, with a scowl on his face, is asking, "What's this talk of centralizing division aviation into some sort of aviation company?"

Commanders of other units that have aircraft also have questions—and scowls—when they hear talk of a division aviation company. Nevertheless there are division commanders in Korea who seriously believe that the aviation company is a step in the right direction.

Those who favor a division aviation company say that putting all the aircraft in the division into one organization, the aviation company, is actually nothing more than the artillery commander did when he pooled all the division artillery aircraft and set up a Divarty aviation section.

"There's a lot of difference," the Divarty commander may rightfully reply. The aviation company will remove from his direct control and operation, aerial observation, which seriously affects the combat effectiveness of his command. One of the most important tools which he uses will be taken away from him.

"No it won't," is the reply. "The company would not take any of the aircraft support from division artillery. In fact, the company will be able to increase Divarty aircraft support. Further, it will make the Divarty observation teams more efficient and it will increase the use of all aviation equipment in the division, simplify supply problems, get

more work out of highly skilled aircraft technicians, and make special type aircraft and helicopters available for emergency use."

**T**HESE are big claims, but first let's find out why there may be a need for a division aircraft company.

In order to perform Army Aviation's many jobs, better aircraft, pilots, maintenance equipment, and more skilled mechanics are required. Further, aircraft have been assigned to eleven different organizations within a division and this eleven-way split has sometimes resulted in the setting up of eleven separate air sections, each requisitioning its own supplies, handling its own refueling, operating its own base radio communications system, its own operations office, and, in many cases, establishing its own airstrip. It is easy to see that if all the units were combined under one organization and all the administrative and logistical support peculiar to aircraft were centralized, a much more efficient operation could result.

For example, some equipment is common to all Army aircraft. A pre-starting heater, a very expensive piece of equipment used to circulate hot air around the engine in cold weather in order to heat it prior to starting, is typical.

Fuller use of skilled manpower would result too. For example, aircraft technical inspectors, who, in the interest of safety, are required to inspect each aircraft following any maintenance performed on the aircraft by mechanics which involves flight safety, would be more readily available.

**A**LL this sounds eminently sensible, but there is still a big question unanswered: Will units needing aircraft be able to get them when and where they need them?

Those who favor a division aviation company say it will provide more support when maximum effort is required by a unit. For example, under the decentralized system, a Divarty commander might need all his aircraft for a maximum effort, but not be able to use all of them because some are under repair. Under the company setup, aircraft which

are not being used to support one of the other units could easily be diverted to the use of the Divarty commander. It is true that this could also be done, with a little more coordination, under the other system, except that the aviators might not be trained to fly artillery missions. The same is true of other type units borrowing aircraft and personnel to support them.

Under the decentralized system Divarty pilots fly all the artillery observation missions, division headquarters and headquarters company pilots fly the administrative, G2 or intelligence gathering missions and photo missions, regimental pilots fly the reconnaissance missions, and the signal company pilots fly that company's reconnaissance missions.

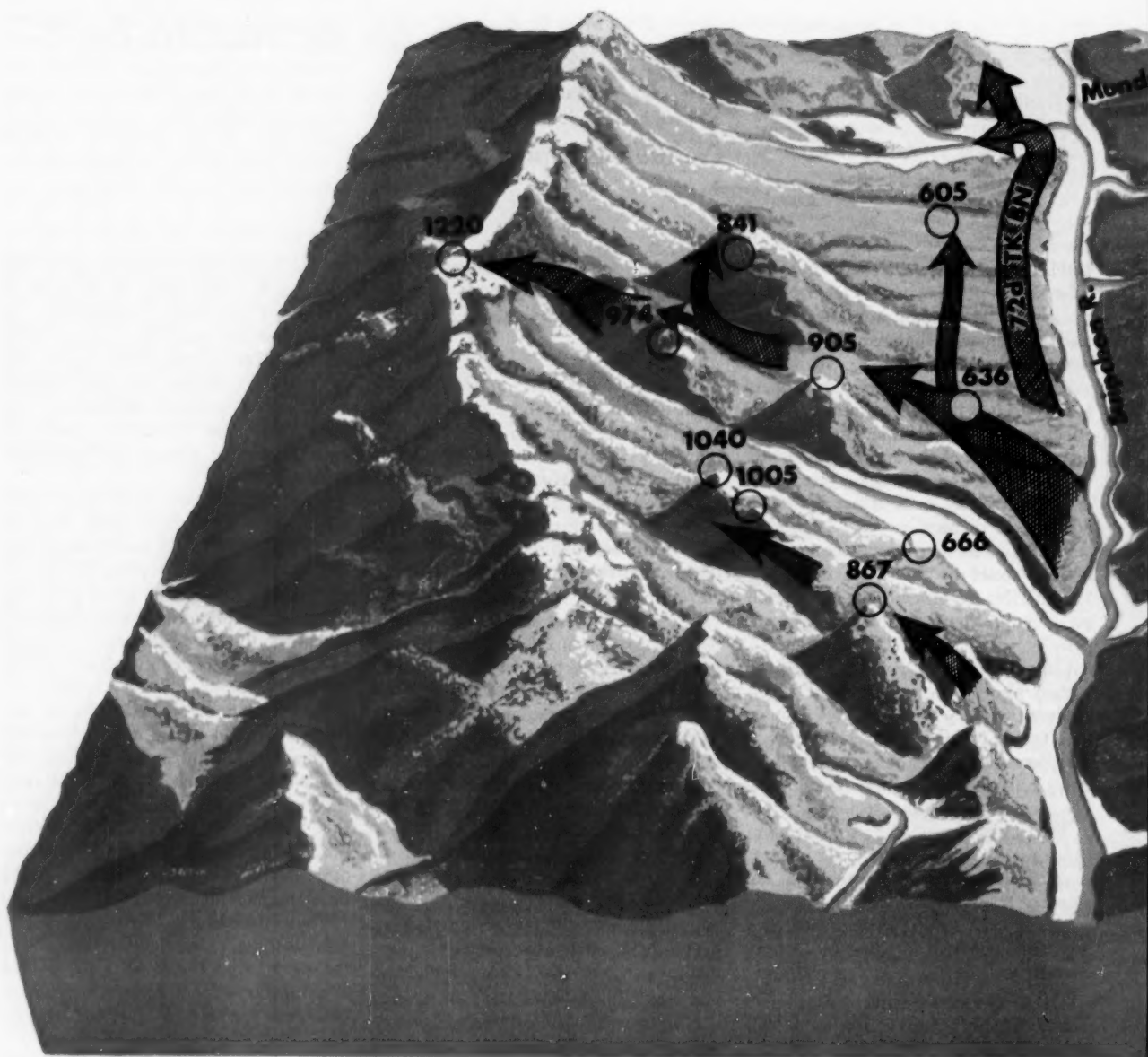
These assignments result in an unequal work load and an unequal amount of combat flying time. Aviators assigned to Divarty fly much more combat time than other pilots in the division because they must keep the front under observation during all daylight hours. On the other hand, those who fly photo missions have the most dangerous job. They are a good enemy target while flying low over a straight and level course. Also the reconnaissance missions, while not as dangerous as photo missions, are more hazardous than the observation type mission.

An aviation company would correct these conditions. Pilots would be trained for all types of missions. All pilots would be placed on the same roster and each pilot would take his turn flying the different type missions. This would result in an equalization of the work load and combat risk involved. Combat flying time of Divarty pilots would be reduced, thus reducing flying fatigue and increasing the efficiency of the pilot.

Perhaps the biggest problem for those favoring centralization is coordination. If units can readily be furnished aircraft support and if what has thus far been theorized concerning increased administrative efficiency, better use of equipment and manpower, and actually better aircraft support can be proven in practical demonstration, the division aviation company will probably become a part of every division.

CAPTAIN WEYMAN S. CARVER, Artillery, now on duty with Headquarters, Eighth Army, is an Army Aviator who recently completed a tour of duty with the 7th Infantry Division during which he flew 247 combat missions.





**THE INFANTRY-ARTILLERY-ARMOR-ENGINEER TEAM DID IT**

# Operation Touchdown Won Hearts

**LIEUTENANT COLONEL VIRGIL E. CRAVEN**

LIEUTENANT COLONEL VIRGIL E. CRAVEN, Infantry, was, as he makes clear in this article, the commander of the 3d Battalion, 23d Infantry, during Operation Touchdown. Now on duty in the Pentagon, Colonel Craven entered the Army in 1941 from the ROTC unit of Kansas State College. During the Second World War he was a company commander in the 34th Infantry Division in Africa and Italy. Integrated into the Regular Army in 1946, he was an instructor in night operations at The Infantry School before going to Korea in July 1951.

I WATCHED the last major United Nations offensive in Korea from the top of Heartbreak Ridge. From the 3000-foot elevation of Hill 931, I was able to follow the dramatic climax of Operation Touchdown—and Heartbreak Ridge was a part of this operation. What I saw from Friday, 5 October, to Monday, 15



Division will always think it more than a coincidence that the enemy's loss of this strategic position had something to do with his sudden desire to resume the suspended truce talks.

Unfortunately grueling months of fighting remained. But in all that time, the main line of Eighth Army in that sector remained exactly where Operation Touchdown put it. Local fights for outposts and favorable hills occurred during the two years of "peace talks," but no decisive action was undertaken.

To understand fully the significance of Touchdown, a brief blackboard drill is essential.

**I**N the spring of 1951, the enemy, his squads heavy with what had been hidden reserves, shoved the Eighth Army south. By late summer and fall, the grudging forces of the United Nations had braced, stopped the enemy drive and launched a vigorous counterattack.

During September, the 2d Infantry Division made sporadic limited objective attacks—never larger than battalion strength—in the rock and rubble environs of Hills 931 and 851, as these summits are designated on battle maps.

Repeated efforts to secure these and neighboring objectives by means of scrimmage-like, short, head-on jolts and end runs were repulsed. The stronger and cagey enemy held the heights. He hid in his elaborate bunkers and caves, some of which could hold an entire 1000-man North Korean regiment. When our

Some tanks were knocked out—but the armor went through

## Heartbreak Ridge

October 1951, was a hard-hitting infantry-armor team, given time to master its signals and get set, successfully drive five rugged miles against a ferocious Red defense which had advantages of terrain and heavy reserves.

Touchdown was the culmination of almost 100 days of continuous combat by the 2d Infantry Division. The Korean war did not end on 15 October when Heartbreak was won, but all of us in the



supporting artillery fire and air attacks were lifted to let our forces advance, the Reds would rush from their safe bunkers to positions that were carefully contrived and frequently changed, from which they could rake our men with small-arms fire, mortars and grenades as we clawed our way, utterly exposed, up the last 300 or 400 yards of naked peaks.

Surprise was lost to our numerically inferior forces. Our limited objective attacks could be kept under constant and concentrated enemy surveillance. A dangerous stalemate threatened. But pressure was mounting at Eighth Army and X Corps for a strong "winter line." Focal points were the Heartbreak and Punchbowl Ridge complexes. The latter was already in our hands. We wanted Heartbreak.

**L**ATE in September, Major General Robert N. Young became the Division's commander. He met with his staff and this is what they told him.

Lieutenant Colonel Thomas Mallon, Division G3, pointed to an operations map (see map) which showed the 9th Infantry under Colonel John M. Lynch on the left. The 23d Infantry under Colonel James Y. Adams, bolstered by the battalion of French Volunteer Forces in Korea, was in the center. The 38th Infantry under Colonel Frank T. Mildren was in reserve. (A word about the French commander, Lieutenant General Monteclair. He took a voluntary bust in rank to lieutenant colonel in order to command the French forces in Korea. However all of us called him "general.")

In his briefing, Colonel Mallon explained that the 9th and 38th had most recently come through hard fighting at Bloody Ridge and Punchbowl. Consequently, the fresher 23d had been assigned primary responsibility for the key objectives—Hills 931 and 851, which dominate the strategic Mundung-ni Valley to the left and Satae-ri Valley to the right.

Lieutenant Colonel Albert W. Aykroyd, Division G2, reported that the Division was confronted by a force of at least 36,000 Communists organized into two corps. He told the General that any map or words he could use would bear poor witness to the ruggedness and complexity of the terrain. The G2 told how the ridge line—894 to 931 to 851, a narrow, rocky, mountainous mass running north and south—dominates the Mundung-ni Valley to the west and Satae-ri Valley to the east. In the Mundung-ni Valley, the enemy was using an old mine to hide his troops by day. Through the Satae-ri Valley, supplies

and replacements also were being funneled to the Heartbreak defenders.

The G2 briefing told how in repeated instances direct artillery hits had simply bounced off the sturdy rock and dirt bunkers built by the Reds. It was apparent that the enemy would have to be blasted, burned, bayoneted and finally dragged out of his bunkers.

After the briefing General Young visited the frontline units. He made several reconnaissance flights in an L-19, studying the terrain from every angle. He had been told that the terrain would not permit the effective use of armor—the one major possible surprise element.

General Young called in his engineer officer, Lieutenant Colonel Robert W. Love. Could the unimproved road, if it could be called even that, along the Suipchon River to the east be made passable for M4 tanks? Not just a few tanks, the General emphasized, but the full striking force of the Division's 72d Tank Battalion.

Give him a few days to size up the situation, Love requested. A few days later he reported that though it would be a major engineering effort, it could be done if he were given sufficient time and adequate fire cover.

Determined to break the developing stalemate, General Young outlined a plan to the X Corps commander, Major General Clovis Byers. The 2d Division would launch a simultaneous attack by all three of its infantry regiments, supported by the entire Division artillery, and closely coordinated with what the Reds would least expect—a tank-infantry drive up the Mundung-ni Valley, spearheaded by the 72d Tank Battalion, and a complementary tank-infantry advance up the Satae-ri Valley by a special task force.

General Byers approved the plan. What would it be called? The fall day had a snap to it. Operation Touchdown, said General Young. When can you get it under way? The answer: 5 October. H-hour was set for 2100.

On 1 October, after what had appeared to be a routine staff briefing, General Young gave the order for Touchdown. The 9th Infantry would move along the Division's left boundary to seize Hills 867, 666, 1005 and 1040. The 38th Infantry, in reserve, would shift into an unbalanced line to seize Hills 485 and 728, and be prepared to attack Hills 636, 605, 905, 974, 841 and 1220 (Kim Il Sung Ridge). Simultaneously, with what a battlefield spotter with football experience could call a "division in motion" stratagem, the 23d Infantry's four battalions would attack and seize Hills

931 and 851. Hill 894 was already ours, having been seized earlier by the 9th Infantry.

**T**HEN General Young put in the "kicker." In addition to the infantry attacks, the attack would employ the full Division tank strength.

Colonel Love and his engineers were told to get the road to Mundung-ni ready for the M4s. Where the road was too narrow, they were to widen it or change it. Where there was no road, they were to make one. (The Reds didn't think this could be done. Still, to play it safe they had laid antitank mines three deep. This precaution taken, the enemy returned to his bunkers, sweated out our artillery, and waited for another line plunge at Heartbreak.)

General Young told his commanders why he thought the plan would work. The simultaneous advance of the three regiments would erase the enemy's chances of concentrating fire, particularly mortar fire. And once the attack was under way, the enemy would be unable to move reinforcements from one threatened sector to another.

The answer to the enemy's ability to cringe safely in bunkers until the attackers struck for the peaks was armor.

On the right flank, over a relatively good road, the 23d Infantry organized Task Force Sturman, a special tank-infantry force named after its commander, Lieutenant Colonel Kenneth R. Sturman. Beginning 3 October, this task force would make "softening up" raids in the Satae-ri Valley. The mission of Sturman's tankers would be to destroy by tank fire the formidable enemy bunkers located on the reverse side of the slopes west of Satae-ri and, when the infantry attacks came, to keep the Reds pinned down.

On the opposite end of the line, the advance of the infantry, notably the 38th, would provide cover for Love's engineers building the tank track to Mundung-ni. When the engineers finished their job, the 72d Tank Battalion would duplicate Sturman's mission and give a helping hand to the 38th and 9th.

**G**ENERAL YOUNG gave his commanders five days to get ready. The Division as a unit and its soldiers as individuals needed this time. The five days delay saved scores of lives, won the ground.

Lieutenant Colonel Arthur Cornelson, Division G4, mustered every available truck and a three-day level of supplies was stockpiled. The stuff that counted—45,000 rounds of artillery ammunition,



10,000 rations and 20,000 gallons of gas—was in place by sunset of the 5th. During Touchdown, using only vehicles permanently assigned to it, the 2d moved 2,000 truckloads of ammunition a distance of sixteen miles, one-third of the route over a one-way defile.

The amazing feat of Love and his engineers in building the tank track merits a special and technical report of its own. It turned out that our engineers were working the most heavily mined and cratered road the Division had ever encountered in Korea.

Time would not permit Love to get all of the road in shape. Parts had to be by-passed, to be rebuilt and widened later. The detour was the stream bed itself, where great boulders and even a small waterfall at the northern end complicated the job.

Having assured the commanders time to get ready, General Young demanded that each battalion commander submit to him a detailed fire plan which would show the use to be made of all weapons available to the battalion, including tanks.

Colonel Adams of the 23d assigned two battalions the mission of securing Hill 931—for which the regiment had been contesting for 22 days. The 1st Battalion, commanded by Lieutenant Colonel George Williams, in position north and east of the objective, would put diversionary pressure on Hill 851. The French Battalion, located on a short ridge leading to the north knob of Hill 931, would draw the enemy's attention by a series of feints, but would be prepared to launch an attack at first light of 6 October to secure the north knob of the objective. The 2d Battalion, commanded by Lieutenant Colonel Henry F. Daniels, in position on the ridge line south of the objective, would plan and execute the attack on the south knob. My battalion, the 3d, was in reserve, but would move up to the vicinity of Hill 894 in time for the attack at the scheduled hour.

Colonel Adams, as had General Young, kept his instructions simple and direct. They remained that way throughout Touchdown.

**N**OW it was our job to prepare the troops. Fortunately, my men were accustomed to night operations, although there was, of course, the problem of the new replacements and the psychological adjustment to an all-out effort, rather than the limited objective actions of the past month.

Colonel Daniels said: "To know that an ol' night owl outfit like yours will be



Each Chinese Red position was a fortress of logs, rocks and dirt from which direct artillery hits sometimes bounced harmlessly. Each was attacked by fire support teams armed with every effective infantry weapon. To protect these teams tanks fired on neighboring positions, forcing the enemy to keep his head down.



up on that hill gives me the certain feeling we'll be eating breakfast in the Gooks' bunkers when the sun comes up." We were a little late for breakfast, but we made it in time for brunch.

After I had explained the plan of attack in detail to my officers, I told them that they were to devote the rest of that day, which was Wednesday, that night and the next day, which was D minus 1, to organizing their companies and making a dry run, in exact battle order, on the hills in the area.

These dry runs were possible because we had been given time. As a result, each man knew who was to be in front of him, who behind. Whatever it may do in other places, familiarity bred confidence on the hillsides of Korea.

On 4 October I went out with an over-strength reconnaissance party to select an attack position. Explicit assignments were made to the two companies slated for the attack. Company commanders picked out possible enemy bunkers. Sketches of the terrain were made and carried back for study and to use in briefing the troops.

We checked the time and measured where the shadows would fall. This was important because the narrow ridge line would force the battalion to string out possibly 600 yards. Each company was to coil to its attack position with the setting sun.

The companies completed their practice night attack. Every platoon leader, officer and noncom reported that he thoroughly understood the plan of attack and that the plan had been made known to all men.

Thus, by the evening of Friday, 5 October, every man was ready. This time it would be different. The entire Division would hit together hard—and with armor, Sturman's gang to the right and what the men called our "hidden ball" outfit, the 72d Tank Battalion in the center.

As H-hour approached, the lid on artillery expenditure went off and Marine Corps Corsairs napalmed, rocketed and machine-gunned enemy positions.

The sun set. It got dark. It was 2100.

**I** CALLED Daniels to tell him my battalion, the last to move, was in gear. So was the rest of the Division, except for Sturman, waiting daylight and his fourth day of raids, and the 72d, impatiently awaiting the resolute engineers.

The 9th Infantry moved out to attack Hill 867. The 38th Infantry, which had stolen Hill 485 just before H-hour, occupied Hill 728 without opposition. The 38th was on its way to Kim Il Sung



Where the track up the valley of the Mundung-ni was cratered, the engineers by-passed the armor through the stream-bed.

Ridge and now had taken positions from which effective cover could be given to the engineers. The gate was beginning to swing open for the tank drive up the valley, if only the road could be readied. The engineers worked on.

At 2100, L and K Companies of the 23d started to uncoil. The night now was full of the noise of machine-gun chatter and burp-gun fire.

Things were going fine. At 2300, the final checkpoint still had not been reached, but the reports, made every 30 minutes, were good. The enemy was busy with artillery, small arms and grenades, but he had to keep his fire scattered against the movements across his entire front.

At 2345, K Company reached the ridge line and cut left, exactly as planned. This was a blocking position to thwart an attack from the rear. L Company reached the ridge line moments later, turned right toward the objective.

Shortly after midnight, K Company startled an enemy unit and immediately was in the midst of a tremendous fire fight. Love Company commander asked permission to go for the peak. Daniels' lead company reported it was poised and ready to jump. I made the decision. L Company was ordered to press the attack to a previously designated terrain be-

yond which it was not to advance. At 0130 Daniels got the signal to move with his lead company.

At 0200, flamethrowers of G Company were in action. This light gave L Company's commander a fix on the lead element of George Company. He pushed on into the blackness.

By 0300, the south knob of Hill 931 was ours.

As we caught our breath on the top of the south knob of 931, we knew it was now our turn to see if we could switch to the defense. For the first time in more than three weeks, we held an important new summit and it was the Reds' turn to counterattack. They came and we rolled them back, down the south side of the saddle. And at daylight my battalion and the French Battalion moved forward to the north knob of Hill 931. I moved my OP to the top of 931.

**W**HEN Daniels joined me, the sun already was high in the sky, but the meal we ate we called breakfast. The North Korean commander's bunker became our CP. We showed it off like a real estate agent on Sunday afternoon when Brigadier General Haydon L. Boatner, assistant division commander, arrived about noon.

We watched the enemy scattering for

cover, and knew that we would be fighting them again for 851.

From our heights I watched the 9th Infantry's 3d Battalion fight for Hill 867 and the next morning through my field glasses I saw a red panel to warn friendly aircraft, which meant 867 was ours. To the left, I saw troops on Hill 728, which had been assigned to the 38th Infantry.

On the right, Sturman's tanks pounded away at the enemy, particularly those on Hill 851.

On the road to Mundung-ni, we could see and hear Love and his engineers at work and noted how the advance of Colonel Mildren's 38th eased the enemy pressure on the engineers. Meantime, back beyond our view, the 72d Tank Battalion was warming up.

From Hill 931, I saw the 9th Infantry's 2d Battalion move through the 8th ROK Division to secure Hill 1024, thereby safeguarding the Division's left flank. The 9th then attacked and secured Hill 1005 after a relentless bayonet assault. The 1st Battalion moved into position southwest of Hill 1040 and, with assistance of supporting fire, took it.

Now the 38th was ready to move against 636 and 605.

Their entire frontline positions having been hit, the Reds fretted and tried to figure out what they might do to stop the infantry and Task Force Sturman. Soon, they would have another worry: the 72d's tanks.

On Wednesday, 10 October, without benefit of a ribbon-cutting ceremony, Colonel Love opened the road to Mundung-ni for tank traffic. As the fog lifted about 0830, the green light went on and we saw the 72d move out. What a sight those tanks were! They moved ever so cautiously at first, but then shifted to speedier gear as they realized that the Communists were caught flat-footed.

**A**S our battalion and other units of the 23d prepared for the coming attack on 851, we kept watch on the 72d's tanks. Carrying L Company of the 38th and a platoon of engineers, the tanks slugged forward. The abandoned mine, which had been turned into an active supply point and which was alive with enemy replacements, was brought under fire and set ablaze. The tanks walloped the area with volcanic vengeance. Scores of enemy were killed.

The tanks did not stop with the mine. They rolled on, although by now the Communists were able to bring artillery and mortar fire into action against the tanks. We saw that there was an area about 50 yards wide and 200 yards long where the enemy fire was heaviest.

Later, we learned that a mortar shell had gone straight into the hatch of one of the lead tanks, killing three of the tankers and wounding the other two.

If any one single thing convinced my battalion that we would go all the way—right to the top of 851—it was the sight of those tanks operating where the Reds had been certain no tanks could come.

As darkness began to fall on the 10th, the 72d, leaving L Company at previously designated objectives, moved back of our line, while on the other end Sturman wound up a week's work.

**T**HAT night, the Communists slipped down and again heavily mined the Mundung-ni expressway and on the 11th pounded away with artillery and mortar at the marauding tanks. But the tankers, with support from the infantry in the hills, rolled on and the 72d sent some of its tanks as far as four miles beyond Mundung-ni. They were without infantry but each tank was overwatched by another about 100 yards behind it. They went so far forward they got out of our sight. Then they came back to help. Targets of opportunity were diminishing for the tanks. As Colonel Mildren led the 38th further to the left towards Kim Il Sung Ridge, the tanks, lacking any semblance of a road, were forced to return to the Mundung-ni Valley. But they maintained pressure on the enemy and helped all of us.

Now it was the infantry's responsibility to keep the drive moving.

On Thursday, 12 October, the 38th to our left moved slowly but systematically from hill knob to hill knob in their grim approach to Hill 1200.

The 38th's three battalions, plus the Dutch battalion which had moved up from reserve to join them, used the devastating effectiveness of its fire support teams to move in daylight. A typical team consisted of six or eight weapons, including mortars, machine guns, rifles and automatic weapons. Each group was controlled by an officer or noncom at the site and a control officer or noncom with the attacking unit. At predetermined emplacement sites, ammunition would be stocked. It took extra time to set these fire support teams up, but the additional fire power it gave the assaulting elements made the preparations worth while.

As the 38th moved forward, we felt the enemy resistance stiffening in our sector. All day and all night of Thursday, the 12th, the struggle persisted from bunker to bunker. There were not many prisoners, but some of them were Chinese Reds, proof that the North Koreans had been hurt so badly by Touch-

down that help had been summoned.

At the break of day on the 13th, the French Battalion launched a final assault on Hill 851. At 0630 it reached the peak. After thirty days and twenty-nine nights of battle, Heartbreak Ridge belonged to the Eighth Army. It still did when the truce came two years later.

The next day the 1st Battalion of the 38th jumped off to attack Hill 1220. By early afternoon, the battalion lacked only a few hundred yards of the peak. Darkness prevented the final attack. The next morning, the last day of Touchdown, the 38th's 3d Battalion passed through the 1st Battalion and took it.

**T**HE vital statistics: Operation Touchdown cost the 2d Infantry Division 1,657 casualties in the fighting for Heartbreak; the enemy lost 9,547. It cost the 2d Infantry Division 1,524 casualties for Kim Il Sung Ridge (Hill 1220); the enemy lost 11,781, including more than 500 to the tanks of the 72d Tank Battalion. We fired 229,724 rounds of artillery at Heartbreak and 266,857 rounds at Kim Il Sung Ridge.

The 7th Infantry Division moved up to relieve us. The enemy called for resumption of truce talks and the men of the Indianhead Division met in "skull sessions" to review the lessons learned in Touchdown. Here are some of them from the viewpoint of a battalion commander.

Touchdown proved that no matter how complicated the overall plan, it can and must be presented to individual commanders in simple terms.

Each unit must be given a single objective at a time and, given this, must be permitted freedom of action to carry out its assignment.

Operation Touchdown demonstrated that battalion commanders can function best when they are not frequently subjected to interruptions or modifications in the basic plan.

Wherever possible, the division as a whole and individual units should be given adequate time to get ready. The 2d had those precious five days at the beginning, and during the operation commanders knew that they could take time to organize attacking units.

Taboos against night attacks are out of date. Touchdown showed repeatedly that successful night attacks can be carried out by infantry.

The operation pointed to the need for developing the closest possible interplay between the tanks and infantry, and to the tremendous hitting power of a properly prepared and coordinated tank-infantry force.



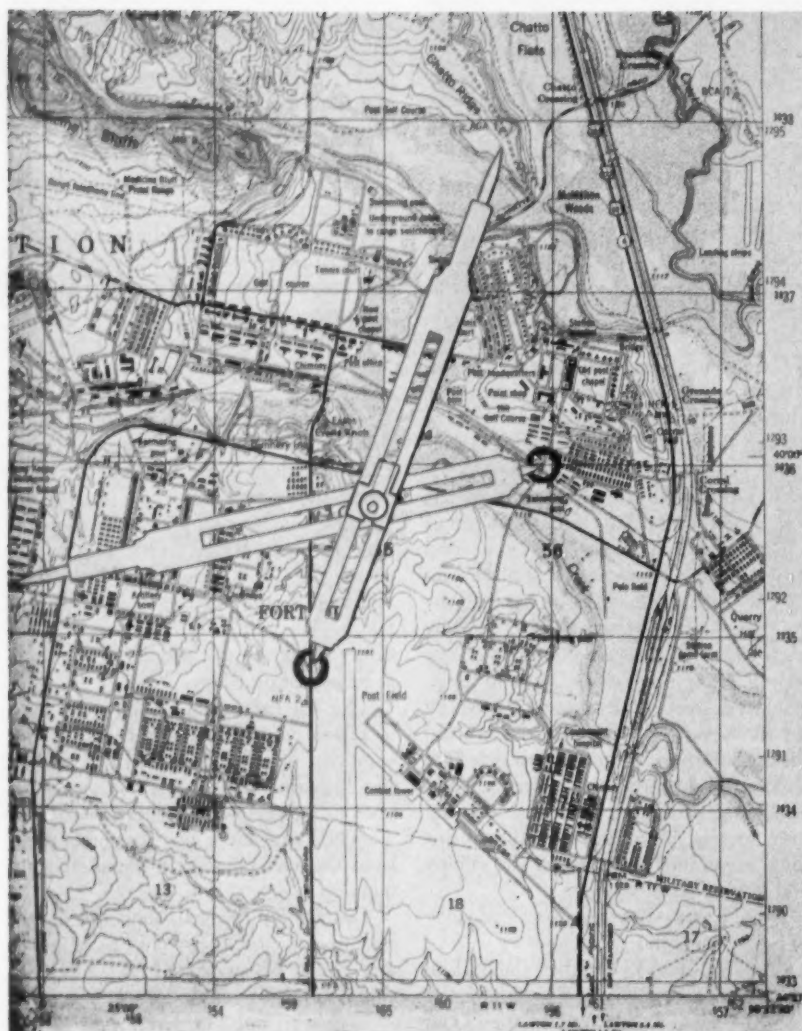


Figure 1



Figure 2

# Gridding the Single Vertical Photograph

**S**INGLE vertical photographs are much more useful if they are tied into the battlemat of the area they picture. In the past, on being tossed a photograph, we located a target on it by

LIEUTENANT COLONEL JOHN P. REMY, Artillery, is presently Assistant Director, Department of Gunnery, The Artillery School.

inspection and then, by restitution, located the spot on a battlemat or grid sheet. This was a slow and awkward preparatory process for the delivery of artillery or mortar fire. Because of the inefficiency of the technique, it was and is unpopular, and little used in combat.

But disregarding the time element involved, the fact is that we have been restituting points from photos to maps

or other charts by one or more methods, and accurately. However, we have overlooked the fact that restitution goes two ways: If we can reconstitute from photo to map, why can't we reconstitute points from map to photo? The answer is that we can.

What do we want on the photo that will tie it to our map, and what value will this tie-in have? If grid lines ap-



Figure 3

Here's a way to transfer map coordinates to vertical photographs accurately and rapidly. Any good intelligence sergeant can learn to do it and the result can be surprise fire delivered quickly.

#### LIEUTENANT COLONEL JOHN P. REMY

pearing on the battlemat were superimposed on the photo in their correct relative position, we could then read photo coordinates to be plotted directly on the firing chart without delay. Such superimposition can be achieved by restituting map grid lines to the photo.

**G**RIDDING the single vertical is not difficult. The simplest and fastest method

of performing restitution is the proportional divider method: with the dividers opened in the form of an X, the legs and pivot are moved until the distance between tips at one end equals the distance between two selected points on the photo, and the distance between tips at the other end simultaneously is equal to the distance between those same points on the map. After locating

two points suitable as restitution points and common to both the map and photograph, set up the proportional divider ratio as shown in Figures 1 and 2. With the ratio thus established, restitute the grid line intersections to the photo and draw the grid lines in ink as shown in Figure 3; number the grid lines the same as the corresponding grid lines on the battlemat. A photo gridded to match



Figure 4

the map or firing chart has now been obtained.

**S**OME of you may be wondering about the technical aspects of this system. First, a fundamental of other systems is true here; namely, it is desirable that no tilt occur during photography, but satisfactory restitution can be obtained where tilt exists up to three degrees. Second, the proportional divider method of restitution—admittedly not as accurate as radial line restitution—is sufficiently so for the use described here. Also it is fast and simple. Third, grid lines would, of course, not be parallel if absolute control were achieved; but they should be parallel when established by the proportional divider method. Yet even with absolute control, their diver-

gence would be small and of little importance; for we are locating points according to their relative position within one grid square. Remember, too, that a large error on a 1/25,000 scale becomes noticeably smaller when "blown up" to the 1/5,000-1/12,000 scales typical of our photos.

What about the practical aspects? This method of placing the Universal Transverse Mercator Grid Reference System (UTMGRS) on single vertical photos has been used at The Artillery School, Fort Sill, with great success, especially in the field of aerial observation. In one class of officers, all inexperienced aerial observers, the initial target locations determined from a gridded photograph were accurate enough (i.e., within fifty yards) in seventy percent

of the cases for delivery of effective surprise fire without adjustment. These observers were being flown in L-19s at an altitude of 6,000 feet, parallel to and slightly in rear of a simulated front line. In another instance, an observer, who was actually piloting his F-80 jet, successfully completed eight firing missions in twenty-four minutes—primarily because of the accurate target coordinates derived from a photo gridded to match the firing chart. Use of such photos permitted direct plots without the time loss involved in target restitution.

Being easy to read, the gridded photograph can also be used to great advantage by survey officers to eliminate any gross error that may have been introduced. Officers on reconnaissance find its use invaluable. And the S2's problem of photo filing is simplified because of the numbered grid lines.

**B**ECAUSE most photo scales vary from accepted standards, a handy device to facilitate reading coordinates on the gridded photo is a plastic template, custom-made to fit the grid squares. (This template is shown overprinting the photograph in Figure 4.) Each division on the template represents a 100-meter square. Coordinates to the nearest ten meters can be read for initial target location. The template is also a valuable aid when firing on an auxiliary adjusting point quite distant from the area where fire for effect is to be delivered: once the observer visualizes the O-T line (when on the ground) or the G-T line (when in the air) and orients his template along that line on the photo, he can make adjustments on auxiliary points and transfer his fire for effect to targets up to 1,000 meters away (Figure 4). Vertical control must be obtained from a battlemat.

You ask, "Who is to perform this restitution, and who is to construct these templates?" With a little practice, a good intelligence sergeant can do each job in ten minutes. Every division artillery headquarters and field artillery battalion has the necessary equipment. If the S2 or S3 can swing it, it is desirable to have the photos gridded and numbered at the photo reproduction center; duplication of work is thus eliminated, and identical photos are gridded uniformly.

Rapid, effective surprise fire from accurate, quickly obtained photo coordinates sells this process to all who use it.



# 'FAIR PLAY AND RESTORATION OF PRESTIGE'

## REPRESENTATIVE DEWEY SHORT

I HAVE said in the past, and I am sure that I will again say in the future, that this nation has been most fortunate in its military leaders. In the 1930s we had an Army of only 165,000 men, but out of that Army we produced men like Eisenhower, Wainwright, Ridgway, MacArthur, Patton, Collins, Arnold, Hodges, Twining, Bradley, Kenney, Vandenberg, and a host of others. . . . It could only have been due to an extreme devotion to this nation and a prophetic insight of things to come that led such men to continue their military careers. For promotion in these days, as I am sure many of you here vividly recall, was a very slow, painful and evolutionary process. The pay was low, but there were certain prerequisites, and there was prestige and dignity attached to the word "officer" and "noncommissioned officer." But today I am very worried about the future of our armed forces for I greatly fear that through a constant whittling away of minor benefits and through the development of an inexplicable philosophy possessed by some people in this country, we are going to attract as the future leaders of our armed forces men of mediocre ability. It is this trend toward mediocrity which alarms me. We are not getting young men to enter our armed forces today of the caliber and in sufficient quantity to give us the type of leaders that were developed prior to the outbreak of World War II. And we are not getting these young men because Congress, and to some extent, the people, are making the military career less and less attractive.

Pay is not the most important item in this problem by any stretch of the imagination. Actually, the pay of our service personnel is fairly consistent with that received in industry for comparable responsibility. So I do not think that pay is the answer. But I do think that fair play and a restoration of the dignity and prestige once enjoyed by officers and non-commissioned officers is the answer.

IN the last Appropriations Act the Congress adopted a legislative rider aimed at closing commissaries located in the United States if there were commercial facilities available. Now this may not seem like a very important matter but if you could read the mail that comes into my office every day about this one subject, I think you would appreciate more and more the importance of these commissaries to service personnel. The savings are not great, but in some cases, and particularly for the junior officers and enlisted men with families, it may make the difference between a reasonable standard of living and a low standard of living.

Then there is the question of the limitation on weight al-

lowances for the shipment of household effects. This seriously affects the officer with a large family who, succumbing to the higher standard of living requirements of our time, has acquired a freezer and perhaps a television set. And woe to the man in the military service who is musically inclined and has been foolish enough to purchase a piano, for he will pay for the shipment of that piano many times over its original cost before he is through. . . . And even if this limitation is removed, I can assure you, although most of you need no such assurance, that every time an officer or an enlisted man is transferred from one station to the next with his family, there are expenses involved for which there is no reimbursement from the Government. There are new draperies to buy, perhaps a bucket of paint and a new screen door; there are always food products that must be purchased, and many other little items which are necessary when moving into a new home. Perhaps it is time for us to recognize the financial loss involved when a family moves in the military services and provide a flat allowance in addition to the shipment of household effects.

Then there is the question of the retirement of regular officers. There was a time before Korea when a regular officer, after thirty years of service, could apply for retirement . . . [but, after Korea he was faced] with a legislative rider which precluded his voluntary retirement. There was justification for this action when the war in Korea started, for it did not seem to make sense to involuntarily recall a reserve officer or a National Guard unit, and at the same time permit regular officers to retire. But for the life of me I can see no justification for continuing this restriction in the last Appropriations Act. Yet it is there, modified to some extent, but still a restriction and one which every young man, eyeing the possibility of making the armed services his career, has noted and has noted well.

FINALLY, there is the "needling" habit which many people in public life as well as those in private life, are apt to engage in when they lose their tempers. I am speaking now of the popular pastime of berating the brass. Every time a mistake is made by our Army, Navy, Air Force or Marine Corps someone is bound to apply the epithet "the brass." You would think from some of the letters I receive, and some of the articles I have read, that every general is a tyrant, a martinet, and of Prussian ancestry. There are probably a few who possess these characteristics, but I think it is time that the American people were told about some of their generals. I think it is time that the newspaper editors, radio commentators, and members of Congress, call the roll of the general officers in our armed forces to ascertain what sacrifices they have made in this latest war for freedom. When that roll is called they may realize that war strikes home in many high places.

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REPRESENTATIVE DEWEY SHORT of Missouri is Chairman of the House Armed Services Committee. He is a veteran of the First World War and has been a member of Congress for 19 years. The paragraphs that appear here are from an address he made at the National Guard Conference at San Diego in October.

# LET'S USE OUR BRAINS

A college Dean thinks we should use our Generals Emeritus

**Lt. Col. Jack C. Jeffrey**

I WAS just leaving a faculty meeting which had voted "not to renew the Rose Bowl contract." All of us who teach ROTC voted to renew. But when they added our votes to those of the athletic department and a few others there just weren't enough.

As I walked across the campus my neighbor, Dean Chester Wisdom, put his hand on my shoulder and said, "Come on over for a brandy after supper; I'd like to talk to you about a valuable asset which is being neglected by the armed forces."

"What do you mean, Chet?"

"We don't have time to discuss it now. You can come over can't you?" We had reached his front steps.

I said, "Sure, Chet, glad to," because I always am glad to. The Dean is wise in many ways, including the selection of beverages. But what I also enjoy is his conversation.

After supper I listened to the news. Then I went next door to see the Dean.

I walked in the back door and up to his study. He had my B&B all ready. "Hi, Chet," I said, as I picked up the glass, and sat down.

"Jack, you know about my assignment to a D/A commission, don't you?"

"I heard a rumor that you were going to teach us how to live."

"That's not quite it. I have accepted assignment to a commission to study living conditions in the armed forces. Of course, we will make recommendations."

"Chet, with your service as a battalion commander, and your academic background, I am not surprised at all. I only hope that your recommendations are acted upon."

"The thing is, there are men much better qualified than I am. And they are available to the Department of Defense. They are the neglected assets I mentioned."

LIEUTENANT COLONEL JACK C. JEFFREY, Corps of Engineers, was a Field Artilleryman from 1932 (when he was commissioned in the ORC) until 1947 when he transferred to the Engineers. He is a graduate of Texas A&M and was integrated into the Regular Army in 1946. He is now on duty at the University of Wisconsin.

"Who do you mean?"

"Your retired officers. Your 'professors emeritus.' Surely from them you can get a superior recommendation for practically every military problem. And from my knowledge, you don't use their brains at all."

"I think you've got something there, Doctor. Why, General Krueger could just walk through a regimental area and come up with both diagnosis and prescription. Of course these officers are retired and many of them are actively engaged. Do you think there are many who would be willing to work on service problems?"

"Why, hell, Jack. They would jump at the chance. I don't know what they are doing but I'll bet lots of them are discussing the very problems these civilian commissions are working on. The very fact that you use so many civilian commissions indicates a need for an organization of experienced military thinkers."

"You're right. When General Eisenhower was Chief of Staff he established a small group of thinkers. As I remember there were three officers given the duty of thinking on any problems considered worthy. The press called it his 'brain-trust.'"

"Yes, I remember that. Another thing your experienced military thinkers could do is write your textbooks. Do you know that all the texts we use in this university are written by recognized authorities of long experience. Your retired officers should write your texts; they are your recognized authorities of long experience. And they would put out a better job than the texts you were showing me the other day."

"How would you set it up, Dean?"

"Are you familiar with the 'Institute for Advanced Study?'"

"Not very. I know it's at Princeton, it's directed by Dr. Oppenheimer, and Einstein studies there. That's about all I know."

"I have been thinking that an Institute for Advanced Military Study would be a fine thing for the armed forces. Selected retired officers would be invited to participate on a long-term or a short-term basis. Facilities could be made

available for selected Allied officers to associate themselves with this 'Institute for Advanced Military Study.' Such an organization could be used in a great many ways to improve the armed forces."

"The Princeton institute is a small campus separate and distinct from Princeton University, isn't it?"

"Yes, Jack. They use Princeton mainly for its fine library. It is like a small Army post with restaurant, offices, lecture rooms and some housing. It occupies about a square mile of land."

"That would be expensive—it would be hard to swing."

"Most good things are expensive. Anyway I have an idea that it would save money in the long run. But that's not the point. The point is: Are you going to use your *brains* or aren't you?"

"I wish there was a less expensive way to use them."

"There is, but it's not as good. You could establish a military library with a couple of stenographers near cities where officers retire—like Fort Myer, Fort Sam Houston, and the Presidio. The mechanics of assigning the right work to the right officer or committee could certainly be worked out. With regard to stipend, I am sure that increasing their retired pay to active duty pay would be fine. There are a lot of details that would have to be worked out. The important thing, in my opinion, is to make full use of our most experienced military brains. These brains are to be found among retired military officers who have time for deep and serious reflection. In the academic field the best articles, best texts, best thought come from men who have passed the age of vigorous action and reached the age of reflection—I am sure the same would hold true in your field."

"Chet, you have certainly come up with a thought-provoking idea. Why did you want to try it out on me?"

"Because I thought you would agree with me and I like to be agreed with," chuckled Dean Wisdom.

"Well, you sure thought right," I said, pouring each of us another B&B. "I am going to send it to the COMBAT FORCES JOURNAL if you don't mind."

He didn't mind at all.



# TANKS AND INFANTRY AT NIGHT

**CAPTAIN HARLAN G. KOCH**

*What are the capabilities of infantry and armor when joined together in a night attack?*

CAPTAIN HARLAN G. KOCH, Armor, was a member of The Armored School research committee which conducted the study that is the basis of his article. Other members of the committee were MAJOR ARTHUR H. KENNEDY and CAPTAIN DALLAS O. BAKER, both Infantry, and CAPTAIN GEORGE L. MILLER and CAPTAIN MATTHEW R. WALLIS, both Armor.

THE many interpretations of the correct tactics of the tank-infantry team in a night attack lead one to wonder if our night attack doctrines have not been too flexible. The battalion commander should be able to discuss a night attack with his company commanders, and the company commanders with their platoon leaders, confident of a common under-

standing, rather than uncertainty because of diverse opinions. That the latter is quite common is attested by the lack of confidence many officers have in the feasibility of night operations that include elements of armor.

The conclusions I have made here were drawn from a report written at Fort Knox in 1952 by a committee of



infantry and tank officers who made a research study of tank-infantry night attacks. The mission of the committee was to clarify the rather vague treatment given the subject in our instructional manuals. Several outstanding battalion commanders and general officers who had participated in or observed night attacks contributed letters giving their views, and these were consolidated and summarized in the committee's report.

The study dealt primarily with the tank-infantry team in a pre-planned night attack against limited objectives. It should not be confused with night meeting engagements, night marches, night ambushes or night raids. A reinforced tank battalion speeding down a road in column at night to link up with a surrounded unit or to exploit an earlier action, is not the type of night operation considered here. Those special operations are in a realm of their own and are predicated upon many different types of situations.

**A** NIGHT attack by a tank-infantry team is made for the same reasons as other night operations. These are:

*To avoid heavy losses which would be incurred during daylight.* A situation might involve crossing a zone heavily defended by tanks or automatic weapons that would be prohibitively expensive in losses during daylight. Major General Ernest N. Harmon (retired), commanding general of the 1st and 2d Armored Divisions during World War II, had a contribution on this point. He wrote:

"We used the night attack three times in the second phase of the Battle of the Bulge under similar circumstances each time. The snow was deep, which slowed our tanks down to about three or four miles an hour. We were attacking towns built of masonry, in which the enemy had placed his tanks with the muzzles protruding out of the windows. The towns were on a slight elevation from the surrounding country, therefore our attack had to go uphill [through] 1200 to 2000 yards of open fields. By lining up the night before and carefully getting the direction angles we attacked at about 0500 hours during the month of January in a swirling snowstorm and in complete blackness. We managed by this method to get up to the town and in among the buildings covering the fire-swept zone in pitch darkness. We captured [three towns] by this method. Our losses were practically negligible."

*To achieve surprise and psychological superiority.* This has been a bone of contention with some infantrymen:

"The tanks ruin the surprise!" Admittedly, tanks create more noise than infantry that habitually uses stealth. But some surprise and secrecy may be gained even with tanks, if we have been laying harassing fires on enemy positions. During the movement to the attack position these fires, largely increased, may cover the clatter of the tanks. Tank engines should be idled in the attack position and the drivers should be cautioned not to race their engines.

A captured German document stated categorically that American armor never attacked at night. One of our battalion commanders wrote that surprise was derived by the very fact that the enemy did not expect tanks to be brought onto his positions, but had expected them to be used in a rear area fire-support role. The shock created by the addition of close-range cannon, firing HE-delay, and the tremendous firepower delivered by the many tank machine guns give the attacker a definite psychological and tangible advantage.

*To gain a limited objective vital to the situation.* An important terrain feature from which to launch a larger coordinated attack the following morning might be the purpose for a night attack.

*To accomplish the primary purpose of any offensive action—the destruction of the hostile armed forces.*

*To maintain the momentum of the attack.* This is done chiefly to sustain impetus or initiative in a situation requiring a twenty-four-hour attacking day. Lieutenant General W. H. H. Morris (retired) wrote that the night attack "prevents the enemy from laying mine fields in his retreat, lends to the continuity of the attack, and also the enemy evacuates his position more readily at night than day. . . ."

**T**HE purposes of attacking at night are fairly well known to everyone. But it's the "when" and the "how" that make for success. The ability of the commander to spot situations which demand or favor the employment of limited objective night attacks is of first importance. The attack must be so executed that there will be maximum control and cohesiveness. Faulty organization of the team, neglect of control measures, and improper conduct of the attack have resulted in a botched operation. Such outcomes have created mutual distrust between infantrymen and tankers and have caused some officers to question the practicality of this type of attack. Consequently a useful tool is in some danger of falling into disuse. The tech-

niques of execution and planning must be more forcibly and clearly emphasized.

Detailed reconnaissance is important. General Patton once stated that soldiers must learn to "conduct lethal operations in the dark." He added that, "previous and very accurate daylight reconnaissance is desirable and limited objective attacks are essential." The commanders must have an opportunity to examine the ground during daylight and as many infantrymen and tankers as possible should view the objective and the proposed direction of attack from a vantage point.

Most commanders who were questioned by the research committee preferred attacking just before dawn, as it permitted selection of fields of fire to stop the enemy counterattack and also permitted immediate exploitation if the enemy was routed. However, situational requirements and surprise variations sometimes require that the attack be at other times.

**T**HE night attack should have a well defined axis or direction of advance with a natural feature or some prominent object as a guide. Trees, hill masses, houses which can be seen silhouetted on the skyline or even a low bright star may be used as a guide to the objective by the base unit. The artillery preparation might be concentrated sufficiently to prove as a guide.

Difficulty of control must be appreciated. This is the single most important reason for the success or failure of a night attack. As General Patton once said, "Except under very favorable circumstances of terrain, and where very thorough daylight reconnaissance has taken place, night attacks by armor are not economical." Rough ground dissected by gullies, small streams, high paddy ridges, and hills amplify the possibilities of lost control and failure. The nature of the ground must receive critical consideration.

One of the most flagrant mistakes of infantry and armor commanders in planning tank-infantry night attacks is in the selection of the objective. Occasionally commanders select an objective which is two or three miles away from the jump-off lines. This usually defeats the attack before it crosses the line of departure. The distance to the objective should be limited to not more than 2000 yards. It should be a positive, easily definable terrain feature. The artillery or mortars might be called on to place an occasional round of white phosphorus just beyond the objective or to illustrate the objective itself. How-

ever, the commander won't want his battlefield illuminated if his purpose is to take advantage of the concealment of darkness. The tremendous difficulty of maintaining control at night places odds against the success of the attack. The shorter the distance to the objective the better the odds for success.

Tank drivers and commanders must be thoroughly trained in maintaining a slow but constant speed. Too often tanks run away from the infantryman. If the infantryman advances ahead of the tanks his position becomes untenable; if the tanks run away from the infantry the tank commanders might receive fire from their own infantry, and they have also lost the close-in infantry protection they will sorely need when they get on the objective. The tank commander must assist his driver in maintaining direction and spacing. He does this by establishing visual contact ahead and to his flanks.

**T**HE number of tank units that can be used depends greatly upon the terrain. Some of the mountainous areas in Korea might hold armor down to only one tank which would follow a road between the paddies. In open country, though, a battalion of tanks and a battalion of infantry can operate with relatively easy control. One outstanding tank battalion commander wrote: "My experiences have indicated that more than ten tanks and two platoons of infantry running around in the same spot at night, results in more confusion than forward motion." Another believed the best organization was a team in the proportions of one infantry unit to one unit of tanks with a preponderance of infantry if possible. The size of the team will be an important decision of the commander who will have to take into consideration the state of training of his units, the enemy, and the nature of the terrain.

Control is much easier if each unit knows the capabilities of the other through previous combined training. If this prior introduction is not possible then every effort must be made to "team up" the organizations while they are still in the rear. Means of coordination should be worked out in the relative quiet of the assembly area. The attack itself will demand considerable mutual understanding and preplanned action by the two commanders.

**T**HE commander who orders the attack should definitely designate the team commander. If there is to be a company of tanks and a company of infantry, one

of the two company commanders should be designated as team commander. The selection might depend upon the attributes of the two men, but the officer making the selection should not overlook the fact that the tank unit commander has the best facilities for control. His radio gives him immediate contact with every man in his outfit and each tank commander can relay information quickly to subordinate infantry leaders through the external telephone. Whatever the decision, it is important that the senior infantry commander of the attack remain in close touch with the senior tank commander in order that the tanks' communications system can be put to full use.

In the "team-up" specific infantrymen should be assigned to each tank and they should look upon it as their tank. The breakdown of the infantry platoon to the five tanks of the tank platoon should be done so that the lowest infantry commander can maintain control of his men and still provide protection for each tank. As Major General J. H. Collier phrased it, "there must be tanks with infantry and infantry with tanks." Once on the objective, the infantry remain closely associated with their individual tanks or the team dissolves into a jumbled mass. The tankers and infantrymen should not be given separate assignments on the objective but should organize as a team in a tight perimeter; each infantryman continuing to remain with his assigned tank. "Once the tank-infantry teams are formed for the attack they should not be broken up nor should the composition of the teams be changed until daylight," General Collier wrote.

**T**HE simplest plan in a night attack is the easiest to control and carry out. It has been demonstrated on the battlefield and in the training that the formation most easily controlled, safest to the infantry, capable of the most firepower, and easiest to maneuver over the ground is the line formation. The infantryman should stay between and behind the tanks in order to destroy any enemy tank-hunters.

The tanks move ahead, firing as they go, and making avenues for the infantrymen through tactical wire and anti-personnel mines. The tanks should be twenty to forty yards apart, depending on the terrain and the degree of darkness. The interval between the tanks should permit maintenance of lateral cohesiveness and visual contact from tank to tank.

Some commanders advocated having the infantry ride the tanks to the assault

area, and then dismount and deploy for action. In order to avoid confusion on the battlefield, the unit, if possible, should move out of the attack position deployed in the manner in which it will cross the line of departure. There should be no change of direction from the line of departure to the objective. It is believed by most commanders that to deploy after crossing the line of departure should be unnecessary if the attack is against a limited objective less than 2000 yards distant. This distance should not unduly fatigue the infantrymen if the rate of advance is properly controlled. Attempting to deploy at night on the battlefield, coupled with the confusion that is naturally going to occur when the enemy opens defensive fires, will complicate and might be disastrous. This also holds true for armored infantry; personnel carriers should be left in the attack position until daylight.

If the organization of the objective calls for more tanks than the unit can control on the battlefield during the attack, they and their infantry should wait in the attack position until the objective has been taken. To have too many vehicles following the formation will only clutter the battlefield and may prove to be a great disadvantage in the event it becomes necessary for the assault team to execute an about face.

The objective should be strongly organized with a tight perimeter with infantry in front of, around, and making contact between tanks; and a tank-infantry team held centrally to add depth to the position.

**T**HE growing mechanization of armies should encourage the integration of infantry and armor. My intent in this article has been to indicate the capabilities and techniques of both arms when "teamed" to conduct a night attack and to emphasize the value of the night attack. The tank-infantry team is a lethal combination not to be discounted and its employment in the night attack should be greatly accentuated. More intensive night training should be conducted to develop proficiency and confidence in night operations. It should be stressed that not all situations will permit the employment of the tank-infantry team and these situations should be immediately recognized. Also not all terrain is tank terrain in daylight or darkness. There are certain limitations that if properly met will bring victory and not frustration. Success in night operations will inevitably develop better understanding between the two arms.

# The Month's Reading

## *Let's Have Martial Music*

HANSON W. BALDWIN  
*The Saturday Evening Post*  
31 October 1953

Bring back the bands! Break out the swords! Increase unit and service competition; it is the breath of life. Build up the elite units. Restore the authority of command, the dignity of rank; give the company commander power to make and break his noncoms. Make the noncom proud of his stripes; increase his authority and prestige. The attempt to equate the technician and the leader of men, which started in World War II, has to be modified; the troop-leading sergeant must have distinctive arm patches and monetary rewards.

Give the enlisted man at least eighteen months in the United States between periods of overseas duty. Treat him as a human being—tough, hard, ready, but human—not a body, or a number. Emphasize leadership; leaders make morale—not a lecture on the history of Iran; not a course at the Food Service School. Standardize, toughen and make more homogeneous the now diverse sources from which officers and noncoms come.

## *Martinetts and Mental Health*

A Psychiatrist in  
*Psychiatry and Military Manpower Policy*  
Columbia University Press, 1953

I did not feel that combat was as likely to bring out psychoneurotic behavior as boredom and lack of purpose. I remember one island in the South Pacific which was never attacked by the Japanese and on which the executive officer was more or less of a martinet. The men developed an extraordinarily wide range of symptoms. I saw boys with hemianesthesia, anesthesia of a quarter of the body, gun barrel vision, legs in extension which could not be flexed—in short, the richest collection of gross hysterical symptoms I have ever seen. I felt very certain at the time and feel more certain now that the number of neurotic individuals would have been greatly decreased either with good leadership or if the island had been attacked once in a while by the enemy.

## *Mahan Today*

CAPTAIN JOHN D. HAYES, USN  
*U.S. Naval Institute Proceedings*  
November 1953

World War II, the test of arms which proved Mahan's thesis, also produced conditions which ostensibly indicated that such a thesis had become obsolete. The effect of this has been that now, in the middle of the twentieth century when wars and theories of wars are leading topics of discussion, the works of this man who stressed the impact of war on man's progress are neglected and his name has become no

more than a legend, despite the fact that he wrote of Europe in an age politically and militarily very much like our own. The causes which produced this trend away from Mahan were the airplane and the atomic bomb; plus the emergence of a belligerent Communist Russia as a great world power and the feeling that the Communist threat could only be answered in kind.

The dimming of Mahan's fame under the impact of scientific warfare can be attributed in part to the U. S. Navy, for despite lasting faith in his doctrines, it no longer looks to him as it once did. Before World War II the Navy was still untried and Mahan furnished it with a beacon, but today, rich in its own tradition and experience, it can establish doctrines in its own right. The incentive to keep interest in Mahan alive in a rapidly changing world is now missing. Mahan's works are no longer required reading to aspiring naval officers and his volumes are left untouched on the shelves of libraries in the new joint institutions of military learning. The U. S. Navy does not have the leisure today necessary for the type of scholarship displayed by Mahan and his sponsor, Rear Admiral Stephen B. Luce, first president of the Naval War College. No contemporary naval scholars comparable to Admiral Sir Herbert Richmond or Captain Russell Grenfell in the British Navy, have come out of this war. None of those who were nurtured on Mahan's doctrines have grasped the splendid opportunity to transform this penetrating theory into a working hypothesis for today's situation.

## *Artillery—1917-1953*

SECRETARY OF THE ARMY ROBERT T. STEVENS  
Annual Conference, National Guard Association

The most dramatic advance in our program to build the firepower of our units has been the development of atomic weapons for battlefield employment. Last May as I witnessed from a forward trench the firing of the first atomic shell from our new 280-millimeter gun . . . I was acutely conscious of the vast change that has occurred in artillery in my time. In World War I days, I trained as the lead driver of a field artillery section. Our 75-millimeter field pieces, each drawn by six laboring horses, had only an infinitesimal fraction of the power of the atomic gun. Yet, by comparison, they were cumbersome in operation. They moved slowly under even the best of conditions, sometimes bogging down completely. They had to be manhandled into position, and once emplaced they had a very limited field of fire. The new giant 280 has tremendous mobility. It can move along a highway at thirty-five miles an hour, and across country with ease. It can be emplaced in a matter of minutes, and fired around the compass. It is so delicately balanced that one man can elevate or depress it by hand if the power mechanism should fail.



This gun will greatly enhance our defensive capabilities, which is why we have shipped some of them to Europe. Ultimately, as Army guided missiles are perfected, they too will aid in delivering fissionable materials or conventional explosives in close support of Army ground forces. The important thing is that we have the gun *now*, and can give our field commanders the capability of using atomic explosives safely and accurately in darkness or in any kind of weather, if it should become necessary to do so.

## *Foxing the Wings*

SECRETARY OF DEFENSE CHARLES E. WILSON  
Press Conference, 13 October 1953

THE PRESS: Mr. Wilson, you have been doing pretty well replacing military jargon with some of your own better terms. What new term do you have for "wing"? Have you got any ideas as to how you can express that better?

SECRETARY WILSON: It is easier for me to think of the number of planes in a group or the number of groups in a wing. Even the same kind of planes—the Marines and the Navy don't have the same number of airplanes in a group or the same number of groups in a wing. I have discovered that. So the wing business doesn't really tell you anything. That is one reason all this emphasis on 143 wings is—I would know how to fox that one if I wanted to, you see, but—

THE PRESS: Are you going to drop the term "wing"?

SECRETARY WILSON: No, I don't think you will drop the term "wings," but you use all kinds of combinations of planes. We have wings of tankers, but we don't happen to count them. We have transport wings. We don't count them. There are certain things we count as effective in this wing business and others we don't. We have reconnaissance wings. We count them in the combat unit, but they don't necessarily fight either, you see, so it is—we have a great many supporting aircraft of all kinds.

THE PRESS: How are you going to fox them, by the way?

SECRETARY WILSON: I am not going to do it. I just said I could if I thought it would be a good thing to do. You see, actually, our medium bomber wings now have just as big bombers in as the heavy bomber wings used to have, you see, and in a sense the Air Force foxed that one, because the heavy bomber wings only have 30 airplanes and the medium bomber wings have 45; so when you just switch that around, you have increased your air strength with the same number of wings. That was the right thing to do for the country, but it is fooling the wing business, the numbers racket.

## *Destroying an Illusion*

WALTER MILLIS  
The New York Herald Tribune  
23 October 1953

Here are all sorts of ideas, most of them illusory. The notion that by expanding our tactical air we can withdraw ground troops [from Europe] is contrary to the experience in Korea and defiant of Air Force doctrine; besides which, there is no money for expanding tactical air, in which Gen. Gruenther already feels himself woefully deficient. The idea

that tactical atomic artillery (or air squadrons) can replace ground divisions is unsupported by any practical experience; and the whole subject of the effect of atomic weapons used tactically on a ground battlefield is still so inadequately explored and so full of unknowns as to offer no good basis as yet for policy.

The idea that America might soon retire from the front lines, removing her troops and leaving in their place only a pledge to bring up reinforcements when needed . . . is again quite unreal. The present trouble with the European defense is precisely the thinness of the existing front-line shield, compounded by the absence of trained and readily-available reserves behind it. Beyond that, the six American divisions in Germany today (like the 6th Fleet in the Mediterranean) are even more important as a political and diplomatic force than they are as a purely military force, and to cut them down would have consequences running far beyond any compensation that could be offered by new weapons or new strategies.

## *Communist Laws of War*

I. N. STEINBERG  
In the Workshop of the Revolution  
Rinehart & Co., 1953

On August 23, 1918, Latzis, one of the most important officials of the Cheka, published an article in *Izvestiya*, with the headline—"There are No Laws in Civil War." He proceeded:

"In almost all periods, among almost all nations, the established customs of war were formulated in written laws. Capitalist war has its laws as stated in various conventions. Accordingly prisoners are not shot; peace delegations have the right to immunity; there is an exchange of prisoners. . . . But when you turn to our civil war, you will see nothing of this sort. It would be ridiculous to introduce, or demand the application of, these laws which once were considered sacred. Slaughter all who were wounded in the battle against you—that is a law of the civil war."

## *The Case for Horse Cavalry*

MAJOR GENERAL JOHN K. HERR  
The Story of the U. S. Cavalry  
Little, Brown and Company, 1953

To sum up, as simply as possible for the lay reader, the case for the mounted cavalry: wars flow over all kinds of terrain, in all kinds of weather, and an alert enemy will try to fight in the kind best suited to his resources. Korea is an example of this. And there are many other areas in the world where the country is too rough and rugged for anything on wheels or treads but where mounted cavalry and pack trains can operate with ease. Mexico, which can be called our soft underbelly, is an example of that. Mounted cavalry can always supply many needed reconnaissance reports which the Air Force can not furnish at night or in bad weather, and which the motorized armored scouting units now in use can not supply when they are blocked on the roads or unable to move across country. No foe within range can hide from cavalry, in fair or foul weather, by day or night, on or off the roads.

# ★ CEREBRATIONS ★

**Our literate cocktail-hour tacticians stand to receive as much as \$10.00 for their contributions to this department. However, the price for those "dashed off" with scant consideration for the rules of composition and rhetoric will be much less. Hold them to four or five hundred words and type them double-spaced.**

## *There Ain't No Spies in Here*

A military man's wife is probably the most dangerous potential espionage agent the enemy has—intelligencewise. It's not the personality but the situation.

She fishes for bits of information to help piece together the other bits of information she picked up at the neighbors and the commissary, because "There are dozens of things to attend to before the move." Quite naturally she tells the landlord and changes the address on the furniture payments, and then the magazine subscriptions have to be changed sixty days ahead of time. Then she has to check with other wives to see what they're going to do.

Such a situation gives a collector of intelligence little leg work to do before he has a pretty good picture of what's up.

We must constantly remind ourselves that security of information is every military man's business. We must each think of himself as a counterintelligence agent with definite responsibilities.

There are a number of "characters" you will meet from time to time who must be throttled in one way or other. Here are some of them.

The blabbermouth at the bar or on the train who wants to impress his listeners with his inside information. MR. BIG shrugs off the plain fact that there have been espionage agents in this country for many years.

The I'VE-ALREADY-SEEN-IT-IN-THE-PAPER character vaguely remembers a general blurb about the classified matter he's reading so he figures it's all right to spread the word around. He might be more careful on Secret and Confidential matter but he's quite a spreader of Restricted material since it's "not very important." He doesn't realize that the great bulk of information gathered by a foreign power falls in the restricted and unclassified category.

The I-GUESS-IT'S-OKAY-NOW character talks freely to the longshoreman at the port of embarkation. He figures the time for security is past. He sees the civilians standing around watching ship loading. Since they already know quite a bit about the movement Corporal John Doe

tells the "friendly" dock worker where the ship is going when asked. It's hard to imagine a more favorable place to collect intelligence on troop movements than at the dock. Yet dock workers include Communists, as has been proven.

The YOU-OUHT-TO-SEE-THE-NEW-STUFF character is the blabbermouth who tells the interested listener all about the new gear the outfit has. He likes to talk shop with his listener who appears to know something about what he's saying. The visitor on Armed Forces Day asks what "that little knob is for" and takes mental notes to fill in the blanks.

One ex-Soviet spy said that Americans were the easiest people in the world to spy upon because of their naïve, too-trusting attitude.

The "interested listener" likes to get information about commanding officers and other military personalities to supplement his rather extensive coverage gleaned from newspapers, military periodicals and the like. This information goes into the foreign country's files. It can become important.

A contributing factor to the postponement of the Iwo Jima D-day was the finding of a piece of paper on Peleliu which indicated there was a new Japanese commander on Iwo. A check of our G2 files showed that he was an artillery specialist. Therefore elaborate preliminary bombardments were fired to counter the expected artillery.

The WE'VE-GOT-OUR-OWN-LITTLE-CODE character is the most common of the lot. Through his personal code he can write the folks back home all manner of classified stuff. He figures no one gives a hoot where he's stationed. But Mama tells the neighbors, who tell the home-town paper. Next week there's quite a write-up. "Pfc. Johnny Smith is now on Verde Island, we hear. Johnny is a member of the Thirteenth Radar Aircraft Warning Company. During his last visit home Johnny told us that it was a highly secret outfit but did say he guessed it was all right to say he operated a . . ." No one has to guess twice what news service picks up information of that kind.

Then there's the NOBODY-ELSE-ON-THE-

LINE character who is a radio or telephone operator. He transmits when he doesn't have to. He gives out classified information on the telephone. The least of his worries are the regulations on communications security. The enemy who monitors communications almost always gets vital information sooner or later.

The WELL-I'LL-BE-DAMNED character is conscientious before the flight over enemy territory or night reconnaissance patrol. He removes everything which might identify him in case of capture. Except a laundry mark up his sleeve, or an IOU from a buddy written on the back of a laundry slip. He's surprised when the enemy interrogators find it and tell him what outfit he belongs to.

The CANDID-CAMERA character is murder. His photos of buddies show up all sorts of things in the background. That little hill in one photo can be pinpointed, even the tree foliage is a give-away. Another photo of a buddy against an airplane shows up a little gadget that spells out tail-warning radar to enemy technical intelligence. This character gets a shot of the new jet interceptor which stopped at his field to refuel. He's seen dozens of photos of the plane in the magazines, so he's sure it's all right. But he doesn't know that all those photos he had seen had certain areas blanked out.

One security slip might set up a situation which would mean military disaster. That's why it is vital that every soldier, sailor, airman and marine must realize his definite responsibility to counterintelligence and report security slips to his unit intelligence officer.

CAPT. USMCR

## *The Puff Target*

The training of aerial observers in the adjustment of artillery fire is expensive and opportunities for use of overcrowded ranges are all too infrequent. But when an observer has mastered the fundamentals of artillery adjustment and radio procedure he can use the substitute range for actual firing that is described here. Of course, the real thing would be better but that is usually out of the question.

Any artillery unit having an area of 1000 square yards more or less free of vegetation and not too rough for a rapidly moving ¼-ton truck, can set up a Puff Range. One officer and three men can operate it and if they turn loose their imaginations and ingenuities they can add a great deal of realism to the operation.

A problem requiring four rounds in adjustment and six in effect, can be com-

pleted well within the eleven minutes required by Army Field Forces Firing Test for artillery battalions.

The following equipment is needed: aircraft (with radio), a ¼-ton (with radio), two additional radios, a sheet of Plexiglas (12" x 24" x ½"), a sheet of grid paper (1:20,000), field glasses, puff bombs, and grease pencils, lead pencils and notebooks.

The area you are going to use must be surveyed and stakes put in every 100 yards. This area must also be laid out on grid paper, adding additional lines, so that you have an intersection every 100 yards. The area should be marked every 200 yards as shown in Figure 1. If the area is to be used for other purposes, a portable marker can be made from a No. 10 can. Flatten the can, weld a three foot iron rod to it and stick the other end of the rod into another No. 10 can filled with cement. Paint yellow or white and mark with black.

The 12 inch x 18 inch piece of Plexiglas is placed over and glued to the grid paper and a right angle "plotter" is made from the remaining piece. It's a good idea to etch in marks every fifty yards along the edges of the plotter as grease pencil marks will rub off. This plus the

notebook and pencils are all the tools you need to run your "FDC."

If there is no high ground at or near the edge of the range you ought to put up a 12- to 15-foot tower to house the "FDC" and to monitor the crew that sets off the charges.

The two radios are placed in the tower. One is aligned with the aircraft and the other with the jeep radio.

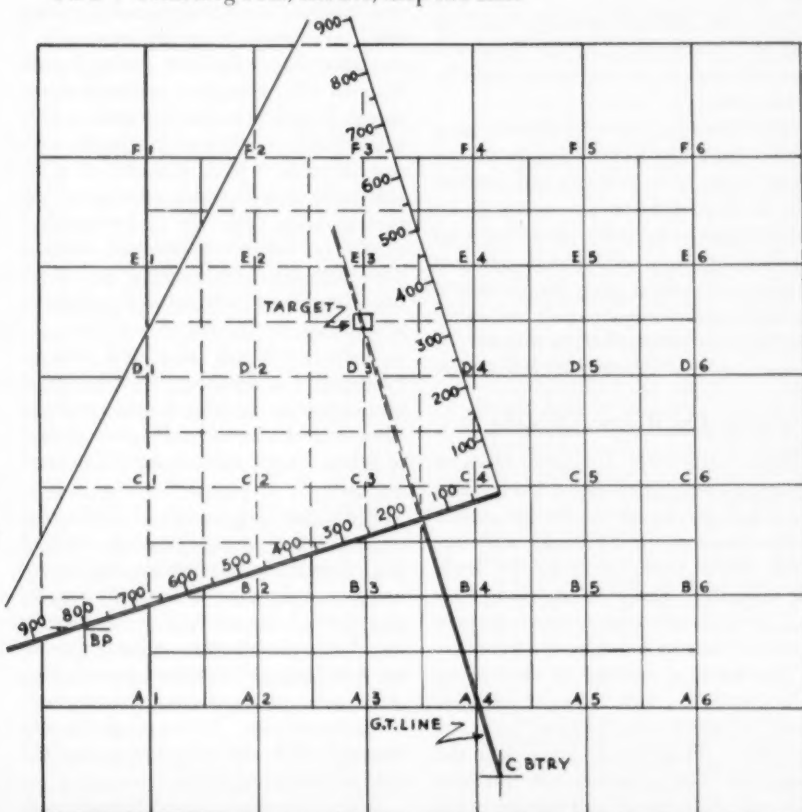
Now for the puff bombs. At Camp Pickett I had them made up locally. In Germany we obtained them from a local factory with training funds, and made to my specifications at a cost of about thirty-five cents each. They produce a nice flash and give out a good cloud of white smoke that can be seen from an airplane at 3000 feet and sometimes 3000 yards. If you must make them locally here is the "recipe" for one puff bomb. In a paper sack or pint ice cream box place one pound of powdered limestone, eighteen inches of detonation cord taped to a cap (blasting, non electric) which has in it six inches of fuze time.

You are in the tower, your two "puff men" are in the ¼-ton with a good supply of bombs, the observer is in the air, your radios all work and you have drawn

**Figure 1. Use of plotter in puff range "FDC"**

OBSERVER: "... from base point right eight hundred, add two hundred ..."

"FDC": "From Dog Four, left five, drop two zero."



**Figure 2. Target and Puff as viewed by the aerial observer.**

Relative size of burst is indicated by man standing at side of burst. Light object to the right is runway marker on old Messerschmitt base of the Luftwaffe. Bomb craters may be detected along a ridge in the middle background. This photo was made with telephoto lens at about 500 yards.



in the GT line on the Plexiglas. You have told the observer the location of the base point and battery position, your recorder has his pencil poised, you're ready to go.

The first command comes down: "From Base Point, right 800 add 200." Placing the plotter over the grid measure you measure first the deflection (keeping the "range edge" parallel to the GT line), and then the range and mark it on the grid. You then call the ¼-ton and give them: "From Dog four, left five, drop two zero." Through your glasses you see the jeep drive rapidly to the D4 marker, one man dismounts and begins to step off the distance from D4. Finally he stoops over, straightens up and waves his arms (indicating the fuze is lighted). You give "On the Way" to your recorder and he relays it to the observer.

Fire for effect can be realistically given by making up half a dozen patterns of fire on cards showing the bursts in relation to the target. These cards would be kept by the senior puff man and used when called for by number by the FDC.

The men working on the puff range must be fast to catch on and thoroughly understand the job. With training and practice they will be able to set off a charge within ten or fifteen yards of the place designated by the observer. This is well within normal dispersion limits.

The idea for the Puff Target Range originally came from the now outdated FM 20-100, September 1947. I have made several changes and improvements over the old method and find that it works well and the men like it.

CAPT. WILLIAM T. SAMPSON, II

### *Air Strike Control*

After seeing numerous air strikes miss the target by the proverbial "country mile" because of faulty target designation or identification I think the job should be turned over to the artillery aerial observer.

I saw several plans tried in Korea, but none seemed to do the job as well as it might have been done. The reluctance of the Air Force to turn over the direction of strikes to personnel not trained in their methods and operating procedures was partly the cause of this. But it ought to be easy to set up a course at Fort Sill to train officers to handle this job and make the air strike a more effective weapon.

In close support air strikes, the aerial observer has what appear to be four advantages over the present methods:

**Familiarity of terrain.** The artilleryman usually has a smaller sector to ob-

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serve and flies more missions over the same area. And so he gets to know the ground better than the Mosquito observer. Frequently an artillery observer, through daily observance, is able to spot a buildup long before it is ready for use.

**Knowledge of the target.** Many enemy positions are difficult to see and find and the artilleryman would have the advantage in describing the target and recommending direction of attack to the flight leader.

**Better marking devices.** The smoke rocket used by the Air Force to mark a target is difficult to see. But the white phosphorus shell or 155mm smoke shell of the artillery can be seen for miles. Smoke shells also make it possible to use different colors in case of enemy deception.

**Better knowledge of friendly troop positions.** The accidental bombing of friendly troops is much more likely when the combat arms are on the move. Closer coordination between the infantry and artillery gives the artilleryman the advantage here.

The most difficult problem would be that of communications, but the idea is basically sound and a solution could be worked out.

The Mosquito pilot and observer have done a good job. But a properly trained artilleryman is by training and position able to do a better one.

Coordination between air and ground forces would have to be closer than it is to make this system work, but a committee composed of men from the two arms should be able to work out a solution.

MARTIN H. JURGENSON

### *What to Do With AWOLs*

Before the 5th Infantry Division (training) was inactivated a few months ago it had developed an effective answer to the question of what to do with captured AWOLs who were serving stockade sentences. The problem was to train and rehabilitate these men—prepare them for duty in Korea.

The existing method of instructing prisoner-trainees had required the prisoners to accompany regular units on problems. This didn't accomplish the objective. The prisoners felt like outcasts and their morale and interest could

not be stimulated. There was a need for a method that would make the prisoners feel that they "belonged," that would make them proud of their own accomplishments. The answer was a prisoner company, commanded and led by able officers and noncoms.

To help orient the prisoner-trainees to this new method, the Division Commander, Maj. Gen. George Barth, explained to them this was their opportunity to get good training and make a start in clearing their records. At the end of the training period he again spoke to them, evaluating their training, and telling them of their future opportunities.

The company commander formulated a plan which enabled the prisoner company to work directly through the division staff sections, thus eliminating the normal company-battalion-regiment routine.

A 100-man company, broken down into four platoons of 25 prisoner-trainees each, was formed. However, each platoon was placed in a separate phase of training to permit the assignment of new apprehendees according to the training they had received before going AWOL.

The limit of 100 men was flexible; within one brief period the strength jumped to 207.

Supply was the hardest problem in the administration of the outfit. The prisoner-trainees were in the stockade along with other men in confinement and it was thus impossible to issue each man his own rifle, mess gear and field equipment. It took considerable time to issue each man his necessary equipment each day and take it back at night. In addition each time the men entered or left the stockade they had to be searched carefully. Sometimes different subjects were scheduled for morning and afternoon sessions, which required reclaiming and issuing equipment at noontime.

Thus the supply room had the appearance of a miniature weapons pool, with mortars, machine guns, automatic rifles, and M1s in racks alongside shelves of helmet liners, helmets, mess kits, tents and poles.

With the cooperation of Ordnance, two separate classes of rifles were stocked, one completely serviceable for range firing, and the other fitted with a metal ring through the safety to prevent breaking down the weapon. Adjustments to the firing pin and hammer, plus locking of the piece, made this weapon completely unserviceable. It was used for dismounted drill and for training that did not involve actual firing.

When firing was listed, guards took

extra care to prevent any attempts of prisoners to escape. At no time was there a slightest attempt by any prisoner to use his rifle for other than its intended purpose.

Night training and a few other subjects had to be eliminated and certain other subjects were taught in private areas. But most of the training schedules were carried out alongside regular training companies. The prisoner platoons and their security guards (approximately one guard to every five prisoners) ate with the companies when in the field. Arrangements for feeding the prisoner company were made a week in advance with the company they were scheduled to be training with at that time.

Some training was done in the area of the stockade, where one large compound, approximately 400 by 250 feet, was constructed by the prisoners. Here, separate areas were set up for rifle, machine gun, and mortar instruction, as well as for conferences.

The prisoners also built compounds in each of the four main bivouac areas where they stayed during their final week of training.

For identification the prisoners wore black helmets with large white circles on each side and large white patches on their jackets. Cadre of the prisoner unit wore red-and-white helmet liners and officers wore green-and-white ones.

Fears that the men would attempt to escape, refuse to work, and create real trouble proved groundless.

"It's amazing how well things turned out," Captain Charles V. Ickes, the company commander, said. "The men realized they would soon be in the front lines and most of them were ready to settle down to learn how to become soldiers—and to restore themselves."

During the months the company existed only four men had to be disciplined with punishment more serious than strenuous physical exercise. Morale of the men of the company was high at all times.

They were told that twenty-four hours after they left the port of embarkation they would be granted a clean "bill of health" by the Army and would have unlimited opportunity for advancement. Since the first group went to Korea, Captain Ickes received several letters from former prisoners who had become non-commissioned officers, thanking him for the training and crediting him with their promotion.

It is interesting to note that in general the prisoner platoons exhibited more interest and ability in their training than

## The Overread Mechanic

Literary genius—or a good old-fashioned mechanic? Which one do you want in your motor maintenance section?

Actually, there is a need for both: The genius to run down the various technical publications and come up with an interpretation; the mechanic to do the work. Maybe this is a facetious statement, and maybe it isn't. You be the judge. Here is a comparison of some of our preventive maintenance publications:

What	Companion Publication	Purpose of Companion Publication	Remarks
New D/A Form 461 preventive maintenance service (1 June 1951)	TM 9-2810 organizational maintenance and supply operation service and inspection (21 Oct 1943) listed as a reference on top of new Form 461	Information on proper use of Form 461	TM 9-2810 was superseded by TM 37-2810 (14 Mar 1945) almost six years before new Form 461 was adopted
TM 9-837, cargo and chassis truck manual (15 June 1951)	WD AGO Form 461 (1 July 45) referred to in paragraph 64 of TM 9-837	Guide for preventive maintenance services	Whereas, above, we showed a new Form 461 referring to an obsolete manual; here we have a new manual that refers to an obsolete form.
TM 9-819 miscellaneous trucks (4 Jan 52)	New Form 461 and TM 37-2810, companion manual for Form 461, listed as a reference on page 303 of TM 9-819	Guide for preventive maintenance service	TM 37-2810 covers old, obsolete Form 461, not the latest one

To further complicate printed instructions, we are informed always to follow lubrication orders. That is fine, except that some vehicles are issued to using units before lubrication orders are published. Then we must use the more often confusing, temporary technical manual. What's a temporary TM? It is a publication, such as TM 9-837, that carries the statement: "This first edition is being published in advance of complete technical review of all concerned."

Some temporary TMs contain mechanical impossibilities; for example, in one case, mention is made of the effect of the ignition switch when trouble shooting the starter motor. The ignition switch is not even part of the starter circuit! Paragraph 233b of TM 9-837 is another illustration of these mechanical impossibilities. Then, too, lubricants are sometimes issued prior to the publication and distribution of instructions relative to their proper use; Grease Automotive and Artillery (GAA) is an example. First instructions were to lubricate everything that used grease WB or CG with grease GAA; then, hidden in an Ordnance newsletter, was an item that stated GAA must not be used on wheel bearings of vehicles going to, or being used in, Korea. Did you know we now fill the wheel hub completely full of grease? Where did I get the information? The Preventive Maintenance Monthly magazine, of course.

Don't get the wrong idea—I'm not peeved—I'm amused and well paid for all this confusion. I've spent countless hours trying to gather information that should have been at my finger tips. The average maintenance man needs this information. However, since he is not a scholar in the fine art of printed research, he should have this pertinent information on his maintenance problems readily available. How should we get this information to him? That's easy.

First of all, technical manuals should be made loose leaf, so that when changes occur, they may be properly placed in the manual. This will save thousands of dollars in manual revisions, and the latest information will be in a place where it may be found. Next, I would publish one basic maintenance manual (loose leaf) such as TM 37-2810. Then, for each new type of vehicle another loose leaf manual would be published; this manual would contain only information peculiar to that vehicle. As more information became available, it would be published for insertion in the vehicle technical manual.

Let's do away with newsletters, bulletins, magazines, and MWOs and get necessary information out as part of a TM in a form where it can be found!

One final bit of advice to those who write these things—when a change is published don't hide the fact in some index that the maintenance man may never see. Get the information to the man who can use it.

WOJG WILLIAM C. TUSING

most regular companies. Officers attributed this to the fact that the prisoners had to pay strict attention to detail and were free of outside distractions from training.

CAPTAIN FREDERICK JENKINS

### *Counter-fire Intelligence*

In a long-drawn-out and deliberate defensive situation counter-battery and counter-mortar intelligence becomes increasingly important. As the enemy becomes stabilized, he becomes capable of placing large volumes of accurate fire on friendly positions from well constructed and well concealed emplacements. While this concealment works to our disadvantage, the relative permanence of enemy emplacements certainly is a simplifying factor in that, once located, this information is not likely to become out of date immediately.

The so-called "third phase" of the war in Korea is a fine example of a deliberate defense. It would be well in light of this example to consider the sources of counter-battery and counter-mortar intelligence available to an infantry battalion.

When the first incoming rounds land, a loud demand for accurate counter-fire intelligence arises. The S2 has a variety of sources at his disposal. These include air OPs, counter-mortar radars, and sound-ranging equipment both of the observation battalion and the regimental counter-fire platoon. However, information from these sources generally goes directly to the artillery, and the infantry battalion S2 only hears of them indirectly. In addition, these sources can only furnish information of a limited number of guns at one time. Certainly they alone cannot be depended upon to provide complete information.

Sources within the battalion include shell reports and the battalion intelligence section. Shell reports are useful but have their limitations. It is difficult to determine the flash-bang time when you cannot see the flash or tell which bang went with which flash or vice versa. When the rounds are coming in in large numbers few men have the time or inclination to rush from shell crater to shell crater with yardstick and compass jotting down notes. Nevertheless much information can be obtained from estimates of direction by sound, and information as to number, type, and caliber of incoming shells, and point and time of impact. The rendering of shell reports should always be encouraged.

The S2 has the organic battalion intelligence section to assist him, and this used to include the counter-fire sergeant whose principal duties fell in this category. The counter-fire sergeant was at one time in the S3 section and later placed in the S2 section more properly in line with his duties. More recently he has been completely eliminated from the T/O&E along with orderlies and bugles, based on the apparent feeling that he served no useful purpose. My experience leads me to believe that if properly used the counter-fire sergeant is more useful than either orderlies or bugles. In my outfit the counter-fire sergeant, working in conjunction with the line companies and the battalion intelligence section, proved to be a most efficient source of counter-fire intelligence.

Whenever possible the intelligence section manned two OPs. These were connected by telephone and radio to the battalion CP and were also directly connected with each other so that they could coordinate and compare observations. Thus they could be reasonably sure that they were reporting on the same shell or gun at the same time. The personnel manning these OPs were especially trained and skilled in map and aerial photograph reading, field sketching, range estimation, use of the compass, enemy weapons and equipment, sounds at night and other necessary techniques. Each OP maintained a map showing enemy defenses, known gun positions and emplacements. Some information for this came from their own observations and some from other sources. These OPs proved to be an accurate and reliable source of information. They were able to give reasonable estimates of direction by sound and accurate azimuths when flash or smoke was observable. They were able to do this because it was their principal duty and because they acquired skill with experience. When possible they were equipped with artillery compasses, and BC scopes or 20-power telescopes, and 8-power binoculars.

The counter-fire sergeant maintained a special map with overlays showing confirmed and suspected enemy artillery and mortar positions. When shell reports from the companies and battalion OPs came in, he pieced this information together. Estimates of direction would be generally rather rough and come from sound estimates, furrows, falling trees, and pattern of impact. With a sufficient number of estimates the accuracy increased. The counter-fire sergeant

with these estimates of direction and knowledge of the range of various enemy weapons could determine the general area from which the fire was coming. Within this area he could check on his map for known or suspected emplacements of the type of weapon in question or possible locations. Usually he could narrow this down to a very small number of possibilities.

As he and other members of the intelligence section worked on this, they became very familiar with the activities of certain hostile weapons and hence developed a fair ability at picking the right one. This information was then given to the heavy weapons company commander, artillery liaison officer, S3, mortar liaison noncom, higher, lower and adjacent units.

The counter-fire sergeant and other members of the intelligence section were particularly effective when they applied this knowledge in situations that were stabilized. On one occasion a counter-mortar radar was located in the battalion area and furnished accurate and valuable information of enemy mortar locations even under adverse circumstances. At times the sergeant was able to determine coordinates of enemy mortar positions to within ten meters of those found by the radar. He was not that accurate always, to be sure, but he didn't have to be turned on and warmed up either. After the radar had moved elsewhere, it at least had left us with some idea of how well we could help ourselves. I'll admit this information did not always enable us to knock out enemy weapons, but it did help our artillery and mortars to silence them, which is the next best thing.

Sometimes simpler and more direct measures can be taken as the time when our battalion was pestered by an enemy recoilless weapon which would use one position for a very short time and then hurry on to another to avoid our counter-fire. In doing this it seemed to use only certain positions, so our mortars zeroed in on one of those positions and waited. The next time the enemy recoilless rifle crew appeared in that position it disappeared in a blinding flash of prearranged mortar rounds.

The point to be emphasized is that there are many agencies for counter-mortar and counter-battery intelligence, but the usefulness of the counter-fire sergeant and the sources of information available within the infantry battalion must not be overlooked. Shell reports and OPs can really help.

CAPT. LOTHROP MITTENTHAL  
*Infantry-USAR*

COMBAT FORCES JOURNAL



# The Month's Comment

## Points of View

"We can no longer prepare for every conceivable kind of war."

ROGER M. KYES  
*Deputy Secretary of Defense*

"There are certain kinds of situations where certain military strength might be necessary, and they have to be provided for."

CHARLES E. WILSON  
*Secretary of Defense*

"There is no sacrifice—no labor, no tax, no service—too hard for us to bear to support a logical and necessary defense."

DWIGHT D. EISENHOWER  
*President of the United States*

## Reenlistment Blues

AS a man who once gloried in the affluence of a \$75 reenlistment bonus, one of our editors was momentarily stunned by the report that Admiral Arthur Radford was beating the drums for reenlistment allowances of \$1,000 to \$1,500. Recovering, he got a bit dogmatic. "I can guarantee they'll rue the day they ever put that kind of a carrot out in front unless they provide some kind of workable built-in device that will get rid of the incompetents," he said. "In my day the \$75 bonus given for three years of service used to bring the professional privates reeling to the recruiting stations long before the 90-day grace period expired. . . . Still, it's pretty interesting. What's the upper age limits for enlisting nowadays? If the Admiral comes through I might be talked into another hitch or two."

In a more serious vein he went on to observe that the Admiral's proposition would have merit only if there was some kind of a sliding scale of payments that reflected the actual and potential worth of the man to the service. Some kind of (and we shudder to utter the words) efficiency rating ought to be devised that would make it possible for the Army to pay the highest bonus to the young and intelligent Pfc or corporal whose potential worth to the Army would make a \$1,000 bonus a bargain for the government. Trouble with a rating system is that there would be a strong tendency to give all master sergeants the highest ratings and scaling them down according to the number of stripes the man wears. Such a procedure would make the bonus arrangement only a little better than a fixed payment for time-servers who can't be faulted out of the service on account of behavior or performance, weak though the latter be.

## AUSTERITY

FOR the quotation of the month we select the statement made by Senator John C. Stennis to newsmen: "We must have a lot of austerity in our military."

The Senator said it well and truly, for the austere soldier (sailor and airman) is indeed a paragon of the military virtues. The austere fighting man lives plainly. He leads a dedicated life. He is a disciplined individual. There are never enough of him.

Austerity in army organization and equipment is also highly desirable. Where there is austerity there is an absence of frills and fat and indolence. An austere army is one where brains, skills, machines and fire power are welded into a highly competent fighting machine.

There are some things that austerity does not mean. The lean and hungry soldier is the very epitome of the austere soldier, but the lean and hungry soldier is not a soldier on starvation rations. Rather he is a fighting man who eats just enough to stay at peak strength, shunning the waste of surplus flesh and flabby muscle.

And so it is with an austere army. An army that is forced by short-sighted economics, or selfish interests, or simple ignorance to spread itself so thin that it becomes too weak to perform its missions is not an austere army. To be forced to do without essential manpower, skills, machines and weapons is not austerity.

Austerity is not achieved by depriving a combat unit of essential radios because the unit has too many men engaged in communications. Austerity doesn't mean that an army should do without trucks, helicopters and cargo aircraft because the enemy has so few of them and therefore does without. Austerity doesn't mean disparaging an army's insistence that it must have every machine and weapon that can be devised that is useful to it, whether it be a tiny electronic gadget or an "atomic" cannon. Austerity doesn't mean cutting so deeply into "overhead" that combat units must support themselves at a cost to their fighting efficiency. Austerity certainly doesn't mean depriving an army of men who have the qualities of leadership and the intelligence and education needed to operate the machines an army must have.

Austerity also doesn't mean that the soldier and his family should be denied the opportunity of creating a happy home life, of having educational and cultural opportunities, and self-respect. Austerity isn't achieved by making slighting remarks about the "unproductivity of the military."

ALL such fraudulent attempts to secure austerity would result in exactly what Senator Stennis was trying to destroy in his comment. He was referring to the need for a strong positive moral tone in the military services that would give individual soldiers, sailors and airmen of all ranks the strength to resist the iniquitous blandishments and tortures of Communist "brain washers."

The danger is real. We seem to be moving into another period of non-shooting war and the tendency to cut, curtail and deprive the military services will be strong and persistent. There will be statements that it can be done without reducing fighting strength. There will be more attempts to make military men second-class citizens.

When austerity is offered we must look the package over carefully to see that it is really austerity and not an ersatz product that will leave us dangerously weakened.

## CAREER MANAGEMENT AND YOUR FUTURE

**T**HIS is the fourth in the series of articles on Career Management and how it works. If you have any comment or questions on this series please feel entirely free to write the editors or Career Management Division.

### *Assignment of Overseas Returnees*

**"I just got my new ZI assignment, and darned if I'm not being sent halfway across the country. Why can't those people ever assign me near home?"**

**T**HIS has been said at least once by almost every officer. The assignment business is a mysterious thing to most officers, and this article will tell you something of what goes on in your Career Management (CMD) branch when you are reported available for an assignment in the United States after a long stint overseas. All officers should realize that there must be a tie-in between three important factors—the officer's wishes, the development of his career, and the requirements for officer personnel in the major CONUS commands.

You have a right to know how you are picked for your new post. Here is how it works. About four months before you complete your overseas tour you are reported for reassignment by the overseas commander to the Department of the Army. When this happens your career branch consults your Form 66 to determine what civilian and military education you have had, what MOSs you are qualified in, where you have been assigned in the past, and a variety of other pertinent facts.

It is an axiom of the service that "the needs of the service must be considered first." Still Career Management tries to assign an officer near his area of preference if it possibly can. Assignment officers must give careful consideration to many factors.

Here are a few examples. If you are 1st Lieutenant Brown, Infantry, and most of your time in the service has been spent as an athletic director, MOS 5661, it would not be logical for us to assign you to a unit near your home town as a National Guard organization and train-

ing advisor, MOS 2150. You aren't qualified for that duty. But you may be assigned as a platoon leader (armored infantry unit commander, MOS 1560) in order to make you a better infantryman. Or, if you are primarily an artillery unit commander, MOS 1193, and you are needed at Fort Sill, it would not make sense to assign you to Fort Dix as an I&E officer, MOS 5004, just because your home is in Newark and there is a vacancy for an I&E officer at Dix. If in this case you had had a good amount of experience in both MOSs, you might very easily be assigned to the vacancy which coincides with your desires.

You would be surprised at the number of assignments which do not coincide. You often hear of the times when this is not the case, but seldom does a fellow officer tell of the times when "I got what I wanted."

Many of you desire to attend your branch school for one course or another, and you note this fact on your Preference Cards. If you are qualified, some of you will wonder why you don't get to attend school on a TDY basis, en route to your new assignment. You know full well that going to school TDY en route is the most economical way to go and we know it, too. But the time element is very important when we talk about schooling. For example, if you are to return in September and the class you should attend doesn't start until 4 January, it's out of the question to order you to school 45 to 90 days early. You will have to go directly to your new post, and apply for the school at a later date.

How about the Preference Card?—the most maligned piece of paper the Army ever made official! This form is consulted prior to each assignment and, whenever consistent with the requirements and with the qualifications of the individual officer, he is assigned according to his

preferences. In fact, your statement of preference is considered so important by CMD, that a new form is being designed. The new one probably will be a full-sized sheet, much easier to understand, with complete instructions on the back. The Army areas and overseas theaters are listed, as are some special preference assignments. We think the new form will be a big improvement over the present one. All you will have to do will be to read the instructions carefully, look at the map on the back, and take time to think about what you want to check.

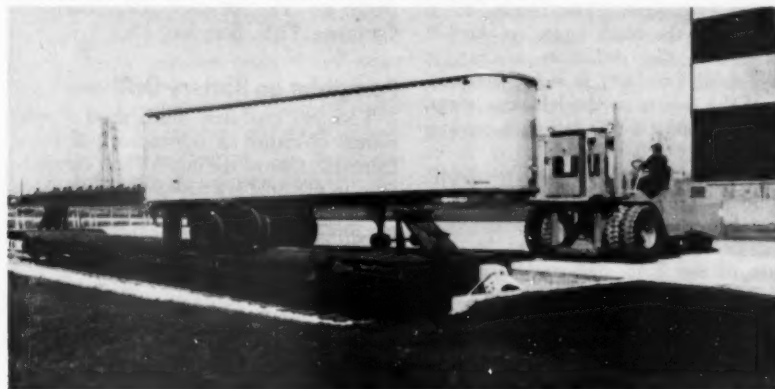
We should mention another very important factor: priority of needs. Each requisitioning agency or headquarters lists its requirements on its requisition according to the immediate need for a certain position. Career Management must do its best to heed that priority. Closely allied to this priority is the fact that some jobs require a higher degree of skill and experience than others. For instance, the assignment officer would be doing an injustice to the officer if he assigned a young lieutenant with only a grade school education to fill the requirement for a college ROTC instructor. Obviously, this would be a case of malassignment. Lots of thought goes into each assignment.

The assignment business is not arbitrary. The officers in CMD have hearts, and if they know what you want they may be able to get it for you. But they can't read your minds, either collectively or individually. Be sure your Preference Card states your desires clearly. If you aren't sure what you asked for on your old card get a new one from your adjutant and mail it to the Chief of your Branch. If necessary, attach a note setting forth clearly any compassionate or special consideration.

[Next month: *Army Aviation*]

# Irons in the Fire

## Fork-Lift Truck Puts Trailers on Flatcars



An attachment that enables a standard, heavy-duty fork-lift truck to position a highway trailer on a railroad flatcar in a matter of minutes has been developed.

The attachment was designed for use with the standard 26,000-lb. capacity Ross Fork-Lift Truck, a product of Clark Equipment Company.

The fork truck is modified to allow speedy side-loading and unloading of highway trailers up to 35 feet in length onto a specially designed railway car which will transport two trailers. The modification consists of a special short upright and a standard side-shifter with toed-in forks that support a pin which fits into a recess at the front end of the trailer.

After the lift-truck has engaged the recess or "toe-plate" of the trailer, it maneuvers the trailer aboard the rail car and locks the trailer in place by dropping the trailer kingpin in a slot in the stanchion of the railway car.

## One Engine—Four Motors

A German has invented a motor vehicle that has one engine that drives four motors—one to each wheel. Science Service reports that the central engine is a 175-horsepower, eight-cylinder diesel that drives an oil pump. This pump forces oil under pressure through flexible tubes to oil motors mounted on the wheels of the vehicle. These oil motors drive the wheels. Since no gears are involved, the system provides stepless speed control. To go faster you push down on the accelerator. To reduce speed, lift your foot and the oil motors brake the vehicle.

## Beechcraft T-34A Delivered

The first production models of the Beechcraft T-34A "Mentor" trainer are being delivered to the USAF. The Air Force, which has ordered a sizable number of T-34s, will give it a series of operational suitability tests. The Beechcraft T-34 is an all-metal low-wing cantilever monoplane with fully retractable tricycle landing gear. It has a top speed of 189 miles per hour and a cruising speed of 173 miles per hour at 60 percent power. It has a service ceiling of 20,000 feet and a maximum range of 975 miles.

## Automatic Radar Units

The experimental units of a line of automatic radar stations 1,200 miles from

the North Pole, are nearing completion.

So lightning fast is the new system that a warning signal will be picked up and transmitted to the U.S. within seconds of the time an enemy aircraft comes within range. It is expected that this will give the USAF defense forces a six-hour warning.

The new equipment sounds a warning automatically whenever aircraft approach—greatly reducing the number of personnel needed for service in the Arctic. The installation is by Western Electric Co.

## Seeing-Eye Airplane



This first flight photograph of the new United States Air Force RC-121C radar airplane shows the top "shark's fin" and lower "big bulge" radome installations of the giant Super Constellation-type airplane. Adapted for special defense missions, the long-range Lockheed transport carried America's most powerful search radar to high altitudes for line-of-sight surveillance. The flying radar stations can locate sneak raiders and can stay airborne for extended periods of time. Similar radar planes are in production at Lockheed for the Navy, which plans to use them as far-ranging forward eyes of the fleet.

## Miniature Wrist Radio

An experimental wrist radio able to pick up broadcasts within a range of 40 miles, has been developed by Army Signal Corps Engineering Laboratories, Fort Monmouth, N. J. as a means of further exploring the possibilities of miniaturization. It has been dubbed the "Dick Tracy," although it does not transmit. The two and five-eighths ounce radio is worn on the wrist in the same manner as a watch. The set is contained in a Plexiglas case two inches long, one and an eighth inches wide, and three quarters of an inch thick. Its Lilliputian size is made possible through replacement of the conventional vacuum tube with five tiny



Germanium-veined parts designated as transistors and by other miniature components. A short antenna wire and a cord connecting the radio with the hearing aid type of receiver worn on an ear are concealed up the user's sleeve.



# Front And Center

## THE ARTILLERY SCHOOL

### Improvements in Gunnery

Various refinements and amplifications in gunnery technique and procedures have been incorporated in resident instruction at TAS since the publication of FM 6-40, "Field Artillery Gunnery," in 1950.

**Precision Fire Procedure.** A single procedure for the conduct of precision fire has been developed. Applicable to an angle "T" less than 100 mils as well as an angle of 100 mils or greater, the procedure eliminates the necessity for the observer sensing deviation in yards in fire for effect.

This method prescribes that a  $\frac{1}{2}S$  factor will be used in fire for effect regardless of the size of the angle "T," unless a deflection bracket of less than one "S" exists. (If the existing bracket is less than one "S," it, of course, is split.) When the  $\frac{1}{2}S$  value is computed to be smaller than 2, a minimum value of 2 is arbitrarily assigned. This facilitates both the establishment and splitting of a 2-mil deflection bracket to obtain a correct deflection.

The major advantages of the new procedure are three: (1) Simplified teaching; only one observer procedure need be taught. (2) More rapid and accurate communication; several transmissions between the FDC and the observer are eliminated. (3) FDC technique simplified.

**"Record of Precision Fire" Form.** In conjunction with the procedure described above, a new "Record of Precision Fire" form has been developed. On the face of the new form, a space is provided for complete initial data, adjusted data, deflection correction, and GFT setting; the face also serves as a complete, permanent record of the precision mission. Printed on the reverse side is the revised FDC sensing table and the new  $\frac{1}{2}S$  table for quick reference. This item is not yet available for purchase through the TAS Book Department.

**Range Corresponding to Adjusted Elevation.** Using the graphic firing table (GFT) to determine range corresponding to the adjusted elevation has been found as reliable as interpolating for range in the tabular tables. Since final firing data are taken from the GFT, the preciseness of tabular interpolation for range is not necessary.

**Range Deflection Fan.** The procedure for marking the deflections opposite the 100 intervals on the range deflection fan has been refined to delete the zeros. Thus "2800" now appears as "28"; and "100," as "1." Except, the marking of "3200" has been changed to read simply "0"; this technique eliminates the possibility of an inexperienced operator reading a deflection in excess of 3200. In addition, the appropriate deflection is now marked on the left edge

of the fan for both the red and black series of deflection figures. The black "T" is placed below the black figure on the left edge. Since the deflection reading is always made from left to right, the presence of the figures on the left edge serves to militate against a 100 deflection reading error.

### Instruction for USAR Units

The fire support coordination center is the subject of classes presented by two officers of the TAS staff and faculty to USAR units throughout the Fourth Army area. The purpose of this instruction was to familiarize reserve units with the latest developments and technique in fire support coordination.

### Effectiveness of Resident Courses

Steps were recently taken here to increase the effectiveness of study assignments for resident courses at TAS. All such assignments have undergone a complete re-examination to insure realism. Concurrently, certain techniques were adopted to emphasize, from the standpoint of the student, the importance of scheduled homework. None of the material covered by a study assignment is directly presented in classroom instruction; students are held accountable for preparing it by "pop writs" and end-of-course examinations. Review sessions, employing the conference technique, and practical exercises are used to correlate "homework" with material given in classes.

For the Artillery Officer Advanced Course, a program on effective study has been presented, stressing the advantages of an organized study plan including a regular time and place for study.

### Revision of FM 6-40

The artilleryman's "bible"—FM 6-40, *Field Artillery Gunnery*, dated January 1950—is under revision at TAS. The new edition will be as thorough, complete, and understandable as possible. Organizations and individuals are therefore being encouraged to submit specific suggestions and new ideas for possible inclusion in the new manual.

Helpful comments would include: (1) specific details of any field artillery gunnery procedure or technique not adequately covered in the present manual; (2) sections or paragraphs of the present manual where fuller explanation is desirable or additional diagrams, sketches, or illustrative examples are required; (3) material or procedures in the present manual which should not be included in the revision; (4) any other areas that should be covered in the new manual.

To insure adequate consideration of all material, contributors are urged to submit

their recommendations promptly and directly to: The Director, Department of Gunnery, TAS, Fort Sill, Okla.

### Pamphlet on Battery Drill

TAS has produced much good supplemental literature on the training of firing batteries. One of the outstanding contributions in this field is a new 8-page pamphlet, *Service-of-the-Piece Drill*. Prepared by the Department of Gunnery, it points the way to the accuracy, precision, and discipline necessary for the creation of a superior firing battery.

The basic concept of the booklet is that properly supervised training is prerequisite to the delivery of timely and accurate fire. Such training—and therefore this pamphlet—emphasizes the value of short, snappy test drills. Daily test drills enable the battery executive (and his superiors, as well) to determine not only the proficiency of the firing battery, but also the deficiencies in individual and team training that require remedial action. The assistant executive, chief of firing battery, and chiefs of section are utilized to the maximum in supervising drill and detecting errors.

An illustrative example is included to demonstrate the proper conduct of a test drill and prescribe a sequence for rapid, effective data checks on all weapons.

The booklet is being issued locally as an advance sheet for the firing battery phase of gunnery instruction. Persons not attending TAS may purchase copies for 10 cents from the Book Department, TAS, Fort Sill, Okla.

### Radio Emphasized

TAS has a new plan to emphasize the adaptability and reliability of radio. The crux of the program, in which all resident instructional departments are participating, is employment of radio as the communication medium in at least 50 percent of all TAS field exercises. This practical instruction is additional to the regular courses and sub-courses offered by the Department of Communication. The Department of Gunnery, for example, uses radio for all observed fire periods; while the Departments of Motors and Matériel, respectively, use it for all motor marches and firing demonstrations. Increased confidence in radio and elimination of the almost catholic tendency to accept wire as the primary means of communication, always relegating radio to a secondary position, are the end results sought by the system.

A subsidiary consequence of the program is worthy of note: each student—no matter in which resident course he is enrolled—now receives some communication instruction and becomes familiar in a practical manner with artillery sets. All students now leave TAS with a sound working

knowledge of applied radio communication technique.

## Observer Message Modified

The message to the observer has been modified.

In the past, when the decision was made to fire on an observed target, almost the whole of the gunnery officer's fire order was transmitted to the observer. But much of this information is not needed by the observer. So for the sake of brevity, a new "message to the observer" has been devised, based on the concept that the observer, if his mission is to be fired, can normally expect to receive everything he requested.

The observer is now sent only the information he needs to know: (1) batteries to fire for effect, (2) number of rounds to be fired for effect, and (3) concentration number assigned. For example: "Battalion, 3 volleys, concentration AA41." When changes are effected by FDC in the observer's initial fire request, they are noted in the message to him; example: Observer has requested fuze VT. Gunnery officer decides to use fuze delay (for ricochet). The resultant message to the observer reads, "Battalion, fuze delay, 3 volleys, concentration AA41."

## New Prospectus Published

The most comprehensive extension courses prospectus yet prepared by TAS is being distributed. *Extension Courses for Field and Antiaircraft Artillery, 1954-55* is broad in coverage, detailed in fact, and concise enough for interesting reading. The prospectus covers everything from mailing and grading procedures to the benefits derived from participation in the program. As the title indicates, all available FA and AAA extension courses (with a brief de-

scription of the scope of each) are listed. For the first time, a section devoted to administrative matters is included. In addition, enrollment criteria and methods are spelled out simply in a complete and factual manner for everyone, from the Regular Army officer to the civilian abroad.

Current course enrollees receive copies direct. Other persons desiring a copy of this publication may get one from the Department of P&NRT, Extension Courses Division, TAS, Fort Sill 10, Okla.

## Student-Instructors

For top quality results, resident instruction must be presented by the most capable instructors available. As any "platform pounder" can testify, it is not unusual to find a student in the classroom with more experience in the topic being presented than the instructor. The Artillery School is now capitalizing on that very situation.

The program uses selected members of the regular Artillery Officer Advanced Course (AOAC) as instructors for resident classes. Participation is voluntary but limited to those officers who are especially qualified to teach particular subjects.

Approximately 100, in the class of 240 officer-students, indicated a desire to teach.

To insure sound selections from this group, information forms, listing the prior military and civilian experience of each volunteer, are carefully screened. Equally important, the instructor potential of each individual is measured.

## Revision of Courses

Extension courses are constantly in the process of revision. Two subcourses now under revision are:

40-26FA, *The Field Artillery Observation Battalion*. Distribution is expected to begin about December 1. This subcourse

consists of six lessons and an examination, and covers organization and employment, survey planning, flash, sound and radar ranging, and meteorology. Credit hours: 18.

20-14FA, *Air Navigation*. Revision under review by Army Aviation School; distribution expected in February 1954; seven lessons and an examination; coverage: navigational methods, aeronautical charts, navigational pilotage, wind vector problems and their solution, and federal navigational aids. Credit hours: 21.

## THE INFANTRY SCHOOL

### Reorganization

A recent reorganization within TIS combined the former Extension Course Department with portions of the Training Publications Department to create a new Department of Non-Resident Instruction. The remaining portion of the Training Publications Department is now a staff agency known as the Publications and Visual Aids Office.

All work pertaining to Army Extension Courses, ROTC and Reserve components is now under the jurisdiction of the Department of Non-Resident Instruction. This consolidation was designed to effect coordination of non-resident instruction by placing all non-resident activities under a single head.

The Publications and Visual Aids Office now includes the Infantry School Book Department, the Army Field Printing Plant, *The Infantry School Quarterly*, the Publications Section, the Training Literature Section and the Visual Aids Section.

The reorganization will achieve greater efficiency and a fuller use of manpower within The Infantry School.

## Missives

An Executive Order by the President prescribes the order of succession of officials who may act as Secretary of Defense and Secretaries of the Army, Navy and Air Force. The succession to Defense Secretary is: Deputy Secretary of Defense, Secretaries of Army, Navy and Air Force (in that order), Assistant Secretaries of Defense (in order of length of service), and General Counsel of Department of Defense. The succession to Secretary of Army is: Under Secretary, Assistant Secretaries (in order of length of service), Chief of Staff, Vice Chief of Staff, and Chief of Army Field Forces.

Army funds for research and development during the current fiscal year are 21.6 per cent less than last year; Air Force and Navy cuts were smaller; 16.2 and 16.3 per cent respectively. The Army has \$345 millions to spend this year on R&D as compared to \$440 millions last year.

The Wherry Act, which has been the

source of the services' only family housing for the past several years, is due to expire next July. However, with housing still critical at many posts and bases, the Defense Department may ask Congress to extend the Act, which permits the Federal Housing Commission to guarantee military housing mortgages.

Air Force and Navy are grumbling more loudly than ever over the even distribution of "lower quality" manpower among the three services. The "even distribution" policy, inaugurated by Gen. Marshall when he was SecDef, has always been unpopular with the fly-boys and sailors. The Army must reiterate at all times and as clearly as possible that fighting squads, platoons, gun and tank crews are as costly and irreplaceable as aircraft and naval vessels.

The plan to convert many of the National Guard's AA outfits to full time defense units near critical defense establish-

ments and industrial complexes is still under study. In general the plan envisages full time duty by some members of each ack-ack battalion while the others would report for immediate duty in the event of enemy attack.

An audit of the Army and Air Force Post Exchange Service by a civilian firm reveals that the breakdown of each dollar spent in the PX goes like this:

Food and Service .....	22¢
Tobacco .....	21¢
Candy .....	7¢
Bottled Drinks .....	10¢
Uniform accessories and clothing.....	12¢
Drugstore items, toothpaste, razor blades, shaving cream .....	6¢
Inexpensive wrist watches, insignia, lighters, and similar items .....	5¢
Stationery .....	4¢
Sundry (luggage, small appliances, portable radios, etc.) .....	13¢
Total .....	\$1.00

# The Month's Books

## BOOTS AND SADDLES

THE STORY OF THE U.S. CAVALRY, 1775-1942.

By Maj. Gen. John K. Herr, USA, Ret., and Edward S. Wallace. Little, Brown & Company, Boston. 283 Pages; Illustrated; \$6.00.

As the title accurately indicates, this book is the story, rather than a detailed history, of the United States Cavalry. It also reflects the never-say-die spirit of those brought up in the sabre and spur tradition. The late General Jonathan Wainwright in a foreword says: "Long have I advocated the retention of at least one full-strength mounted cavalry division, equipped with pack artillery which may be carried in pack or drawn behind horses. Such a cavalry division can operate in any weather, in any country, in any climate, and in any terrain. Let us remount the 1st Cavalry Division and return it to the United States to serve as a nucleus for expansion, if necessary, or for immediate action in an emergency." And the last sentence in the book proper is "There is no substitute for cavalry!"

The story of the American cavalry, and particularly of its part in protecting the westward expansion of the nation, is an interesting one, and it is fitting that it should be told by General Herr, our Army's last Chief of Cavalry. His co-author, Dr. Wallace, is a professional historian. If the story is also the story of the end of American cavalry, General Herr clearly does not believe that it ought to be. He says that the Russians today have at least twenty-five mounted divisions. Colonel Louis Ely, in his book, *The Red Army Today*, sets the figure as of 1949 at "over twelve horse cavalry divisions."

Incidentally, a good quiz show question might be: "In what war was the largest cavalry force used by one nation?" General Guillaume of the French Army in his *Soviet Arms and Soviet Power*, says the answer is the Red Army in World War II, "when the Red Army not only kept its cavalry but it never ceased to increase its numbers."

Although General Herr argues for the retention of cavalry, he has not let his views interrupt the flow of the story. There is considerable emphasis on the distortion, both in narratives and in pictures, of the facts of cavalry participation in American wars from the Revolution onward. There is some indication, perhaps not enough, of the great regimental pride and family feeling within units in the days of what was, with few exceptions, permanent assignment to one regiment. The redesignation of cavalry units, which the infantry had gone through earlier, in 1861 was done with typical disregard of the value of this pride. Incident to the changes, was an order requiring the dragoons and mounted riflemen to give up their distinctive uniform facings of orange and green, respectively—"to which distinctive detail all were strongly attached."

- *Old Horses Never Die*
- *Who Starts Wars?*
- *Story of a Captive in Korea*
- *Traitor, Spy and Temptress*

Another distinctive, and even more personal, detail was for many years officially prescribed for the cavalry alone. In 1848 the War Department ordered: "Moustaches will not be worn (except by cavalry regiments) by officers or men on any pretense whatever."

Also on the personal side, and debatable, is the authors' argument that one of the factors which contributed to the elimination of cavalry in our Army was jealousy on the part of officers of other arms, "especially among soft, and inactive officers behind desks," over the "certain indefinable social prestige which the man on horseback, the cavalier, the *hidalgo*, the gentleman, has always had over the man on foot."—MAJ. GEN. H. W. BLAKELEY.

## WAR—CAUSE AND PREVENTION

FROM ARROW TO ATOM BOMB: The Psychological History of War. By Stanton A. Coblentz. The Beechurst Press, New York. 539 Pages; Index; \$6.00.

War, says Mr. Coblentz, is the master phenomenon of the ages and the overshadowing threat of our own time, but "men have never made much of an effort to understand its nature and to combat it in the light of understanding." The object of his book is to "analyze the conscious and subconscious impulses, the incentives and deterrents, the instilled habits of mind, the traditions, the mass motivations that underlie all mass combat." He seeks to present the psychological history of war so that the reader can arrive at some realization of what must be understood about its true nature and how war may be prevented. The alternative to success in the prevention of war is "the annihilation of civilization or

of man himself."

Mr. Coblentz, who incidentally is both a writer on war and a poet, thinks that man's constant resort to warfare is more a matter of centuries of indoctrination than any inherent desire to fight. He believes that professional military men "have a strong impulse to practice their trade." "We in the United States," he says, "have recently had one notorious case in which an outstanding general brought about his own downfall because, in defiance of his commander-in-chief, he had advocated measures that the latter thought likely to involve us in universal conflict." The idea of the inevitability of war, he thinks, is most conspicuous in military circles, or circles strongly affected by the military.

It is easy to cite historical examples, particularly in the cases of wars precipitated by Germany or Russia, in support of this theory, but it is equally easy to establish that the United States has been pushed toward wars more by civilians than by the military. Whether the civilians were from "circles strongly affected by the military" is certainly open to question. It would be hard for anyone to believe that within the foreseeable future all wars could be prevented, but it is pertinent to the author's comments on professional soldiers that General of the Army Omar Bradley, in his capacity as Chairman of the Joint Chiefs of Staff, repeatedly stated: "We do not consider world war to be inevitable." And in the author's solution of the problem of preventing war the crying need is stated to be the training of our political leaders for their responsibilities—"even as the leaders of the pulpit, the bar, and the army."—MAJ. GEN. H. W. BLAKELEY.

## REPATRIATE'S STORY

I WAS A CAPTIVE IN KOREA. By Philip Deane. W. W. Norton Company, Inc., 1953. 253 Pages; \$3.50.

Philip Deane, correspondent for the *London Observer*, was captured by the North Koreans thirteen days after he arrived in Korea to cover the war in July of 1950. In April 1953 he was released. This book is about the two years and nine months in between.

His account of the thirteen days he was

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

## LINES FROM AN OLD BOOK

Be wise in time, and turn your horse out to grass when he shows signs of age, lest he end in a ludicrous breakdown with straining flanks.

HORACE

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★



in action with American troops is among the most moving we have seen. Here were Americans in savage fighting with little or no idea of why they were there or what they were up against—and giving a magnificent account of themselves. Deane himself was wounded twice before he was captured.

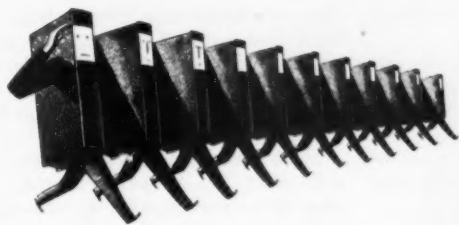
Then began the long marches through the cold, the brain washing, the endless humiliation, the merciless executions, death from hunger and lack of medicine—all of the things we have come to associate with enemy prison camps. Yet with these things, there were interludes of surprising kindness when it was evident the enemy was doing what he could in spite of his own pitiful lack of food and proper clothing.

Deane gives us a picture of his captors that is at once terrifying and a little sad. It is a picture of some whom power has utterly corrupted; of others, simpler in their faith, who have accepted Communism as a new religion because the pitifully little it gives them is more than they have ever had; who will obey orders to shoot prisoners or to take reasonable care of them with equal facility and very little puzzlement. And there are those educated men, like the former dean of the Teachers' College in Seoul, who had gone over to the Communists, well before the invasion of South Korea, and who said to Deane:

"... But there were others who would turn anyone against them—the one, for instance, who wrote outside the American PX in Seoul [this was during the Occupation] 'No dogs—no Koreans.' And those who acted as if we had the plague when we went near them. They called us 'dirty yellow bastards' to our faces. . . . Intellectually, Western thought appeals to me more than Marxism-Leninism, but the people nurtured by Western thought want to, and can, call me a 'dirty yellow bastard' while those nurtured by Marxism-Leninism are not allowed to call me that. I am a small man and I have my weaknesses. I cannot disregard insults, nor can I soften them by saying to myself, as Christ did, 'they know not what they do.'"

Deane writes of American soldiers in the camps who died bravely, of some who died heroically, and of some, though they were a small minority, who stole food from fellow-prisoners and stripped the clothing from the dying, hours before they died.

Finally, Deane describes his fantastic journey of repatriation when he and a group of diplomatic and religious "internees" were sent through China and Russia in a de luxe train with more food than they could eat, private servants, and an unusual amount of freedom to observe conditions and people during stops and layovers. One thing Deane observed during the first part of his trip—from Pyongyang to Antung—is noteworthy. Along the road, this being on the night of April 8, he counted more than 1,000 trucks moving over bridges that were completely intact while all along both sides of the road every town had been destroyed.



## Pass In Review

**Unfortunately the book publishing business** goes through feast or famine cycles. After a dreary and unproductive summer enlightened only briefly by Dr. Kinsey's opus, the fall season has brought forth a harvest so bountiful the JOURNAL could not hope to review them all. However, there are some that deserve more than passing mention.

**There is, for example,** a largely unheralded little gem called *The Raid* (\$3.00) by Laurence Greene. This fascinating biography describes John Brown's famous raid at Harpers Ferry as seen through the eyes of the villagers. No man to go about his research in a slipshod manner, Greene got himself a place on the side of one of the mountains near Harpers Ferry and settled down to do his book on the spot. We hope to have *The Raid* discussed more fully in a later issue.

**One of the best books** of the season for Civil War fans is Bruce Catton's *A Stillness at Appomattox* (\$5.00). We didn't get the book in time for a full-length review in this issue but I had a chance to read an advance copy and it's topnotch. This is the final volume in his trilogy on the Civil War, the other two books were *Mr. Lincoln's Army* (\$4.00) and *The Glory Road* (\$4.50). These three books would make an unusually fine Christmas gift.

**Several notable fiction items** have come out this season, too. Sholem Asch has a new title *A Passage in the Night* (\$3.75) that seems to be headed for the best-seller lists, and for the historical fiction fans, Samuel Shellabarger has *Lord Vanity* (\$3.95). I haven't read the book yet, but the trade has certainly done a good bit of buzzing about a new book by Saul Bellow called *The Adventures of Augie March* (\$4.50).

**A new blossom** on a hardy perennial is the latest of C. S. Forester's Hornblower books: *Hornblower and the Atropos* (\$3.50). This one fills in the three-year period between *Lieutenant Hornblower* and *Captain Horatio Hornblower* and measures up in every respect to the other stirring narratives of naval adventure. Incidentally, take a look at the inside back cover of this magazine. Among the books in our special sale, you'll see a real bargain in not only the Hornblower series but three other Forester titles as well.

**While it's not yet ready** for review, those of you who check our "New Titles of Note" column will see that the final volume of Churchill's memoirs *Triumph and Tragedy* will be out this month. Since this volume starts off with the landings in Normandy and carries through to the end of the war it promises to be the most interesting of the lot. This, too, is a fine Christmas gift selection. Incidentally, we carry all of the Churchill volumes in stock and if you really want to go all out on a gift for someone, get the whole set.

**Another new adventure story** that rates high in interest is *Undersea Patrol* (\$3.75) by Commander Edward Young of the Royal Navy. He tells a hair-raising story of the exploits of the sub he commanded during World War II.

**One of the really intriguing** pieces of fiction we've read just recently is Vern Sneider's *A Pail of Oysters* (\$3.50). This book comes out just as his previous work *A Teahouse of the August Moon* hits Broadway in play form. The setting for his newest book is contemporary Formosa and is a truly fine and well-written story.

**In a more sobering vein,** we would recommend *Report on the Atom* (\$5.00) by Gordon Dean, for three years Chairman of the Atomic Energy Commission. Mr. Dean has written a factual account of what our atomic energy program is, what we have done and to some extent what the future holds. His words on the peaceful potential of atomic reactors open vistas that are most interesting to contemplate.—R. F. C.

This struck him as a curious way to disrupt enemy communications.

Deane has tried very hard to make this report objective, and he has succeeded admirably. Nowhere does he permit the treatment he received to turn his book into what it might so easily have been—a worthless diatribe against his captors.—ORVILLE C. SHIREY.

#### PIECES OF HEMINGWAY

**THE HEMINGWAY READER.** Edited by Charles Poore. Charles Scribner's Sons, 1953. 652 Pages; \$5.00.

It is not the purpose of this review to debate whether or not Ernest Hemingway is this century's greatest writer of English prose. We leave such matters to the reviewers who seize upon the publication of a new selection from an author's works to debate such matters with themselves long and learnedly. We say he is and will cheerfully argue the point with anyone so inclined.

Mr. Poore has made an excellent selection from the body of Hemingway's work. Although he has to leave out much that some readers will wish he had included, the selection is clearly representative of Hemingway's writing as it has developed from *In Our Time* to *The Old Man and the Sea*.

Among the selections are *The Sun Also Rises* (complete), excerpts from *A Farewell to Arms*, *To Have and Have Not*, *The Old Man and the Sea*, *Death in the*

*Afternoon* and *Green Hills of Africa*. Mr. Poore has included eleven short stories ranging from the anthologists' favorite, "The Snows of Kilimanjaro," to a new one not previously published in a book, "The Fable of the Good Lion."

For a bonus, there is an elaborately insane satire, *The Torrents of Spring*. Just what Mr. Hemingway was satirizing is hard to say, and the plot is something that might have been conceived by Robert Benchley and then cut up and pasted together by Rube Goldberg, but the *Torrents of Spring* will be an unusual experience for those who may not have read it.

Mr. Poore's foreword and his brief prefaces to the selections are helpful without being overpowering. Altogether he has done an admirable piece of work.—ORVILLE C. SHIREY.

#### ANOTHER ANALYSIS OF COMMUNISM

**FROM LENIN TO MALENKOV.** By Hugh Seton-Watson. Praeger, New York, 1953. 377 Pages; Bibliography; Indexes; \$6.00.

To the torrent of books on communism, Seton-Watson has added a useful volume. His analysis of the common pattern of Communist behavior is particularly commendable, as is his explanation of the techniques of communism, not only where they were successful but where they failed. An especially interesting part of the book deals with the growth of totalitarianism in Soviet Russia and the inter-relationship of the regional and national movements with Moscow.

Seton-Watson is admirably acute in some of his opinions: "Mass witch-hunting, even if conducted by eminent persons, is a poor method of dealing with the communist danger . . . there is no doubt that communism is a deadly menace to freedom, and there is no doubt that fascists hate communists . . . but fascists must not be allowed to take the leadership of the struggle against communism, as the communists once took the leadership of the struggle against fascism. . . . There are two divisions in the world today. One is between the communists and the rest. The other is between those who regard slavery, torture and massacre as permissible methods of political struggle and those who do not. The first division is the more publicized, the second the more fundamental."

If you have enough fortitude to tackle another book on communism, you will find this rewarding and useful.—RICHARD G. McCLOSKEY.

#### PAIRES' RUSSIA, 5th EDITION

**A HISTORY OF RUSSIA.** By Bernard Pares. Alfred A. Knopf, 1953. 642 Pages; Maps; Index; \$7.50.

The late Sir Bernard Pares spent much of his life among the Russian people, studying their historical records. He made twenty trips to that country, the last in 1936 despite the fact he had become *persona non grata* to the Soviet rulers. The first edition of his history appeared in 1926, and ever since then it has been accepted as

the standard history of Russia. This is the fifth edition, revised by Sir Bernard in 1947, two years before his death.

This history is so well known throughout the world that only a description of the current edition is needed here. Beginning with the prehistoric Slavs, Pares traces the course of Russia's history to the Bolshevik Revolution of 1917. There are two lengthy, penetrating chapters on the Soviet Union, followed by one on the USSR in World War II, and an epilogue on the postwar Soviet that brings the history to 1947. Richard Pares, the author's son, adds an introduction which tells how Sir Bernard's passion for Russia developed. There are an up-to-date bibliography and ten new maps. This is truly the scholar's history of the Russian people, and the current volume is a fine example of the bookmaker's art.—N.J.A.

#### RAILROADS IN THE CIVIL WAR

**VICTORY RODE THE RAILS: The Strategic Place of the Railroads in the Civil War.** By George Edgar Turner. The Bobbs-Merrill Company, Inc., New York, 1953. 419 Pages; Illustrated; Index; \$4.50.

Every student of the Civil War knows that this was the first war in which railroads played a major role. Troop concentrations were speeded by use of railroads by both the North and the South. The victory at Bull Run was largely due to the unexpected arrival of Confederate troops over the Manassas Gap Railway, and when

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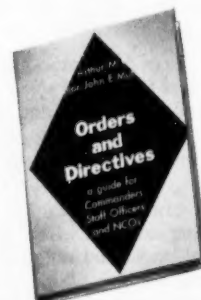
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this was seen, the strategic importance of this new form of transportation became obvious.

Mr. Turner's book is the best study to date on the logistical and strategic significance of the railroads in the Civil War. His examination of the governmental organization, North and South, shows the great advantage accruing to the federal forces from better railroad administration in Washington than in Richmond. His description of rolling stock and railroad lines, supplemented by many excellent photographs and maps, provides necessary information concerning material resources.

—BRIG. GEN. DONALD ARMSTRONG.

#### HOW THE LIMEY FIGHTS

**BRITAIN AT ARMS.** By Thomas Gilby. British Book Centre, New York, 1953. 361 Pages; Index; \$2.75.

The British soldier has for centuries now been driving his officers, his allies and his enemies quite mad with great impartiality. When he has had his tea and washed up his mess gear, and is quite sure that there is nothing else he has forgotten, he will attend to whatever war he happens to be fighting at the moment. Then, to the confusion of his exasperated allies and the consternation of the enemy, he fights like a tiger.

This little book is a collection of excerpts from letters, diaries, reports, and recollections of the British armed forces from 1704 to Korea. Most of them were little known to begin with, or have been out of print for years, but they show better than some of the great martial passages of English prose the temper and attitudes of the British fighting man, whether private or admiral.

It is not possible in a short review to quote a "typical" passage if, indeed, it would be possible at all, but one of the best is the annoyed comment of a brigadier about his South Korean allies: "I am not going to have them executing people on my doorstep."

A good part of the book may not be very meaningful to the American reader, but it will show him beyond all doubt that some of his own odd military characteristics are honestly come by.—O. C. S.

#### ARNOLD AND ANDRÉ

**THE TRAITOR AND THE SPY.** By James Thomas Flexner. Harcourt, Brace & Company, 1953. 431 Pages; Illustrated; Index; \$5.75.

Until the publication twelve years ago of *The Secret History of the American Revolution* much had been written in defense or denunciation of Benedict Arnold, the Traitor, with not much care taken to separate fact from legend. Carl Van Doren's work unearthed from British secret archives documents that make Arnold's act even more infamous. It wasn't his lack of faith in the cause; he had fought like a demon and bled for it. Nor the slights he suffered at the hands of Congress; his relative rank had been restored. He had the cushy Philadelphia command, the company of a lovely young wife (Peggy Shippen, the Temp-

triss) whose love of luxury he shared, and an opportunity to line his pockets through military purchases. It was simply his cupidity, which manifested itself early in life, that impelled Arnold to make the offer to Sir Henry Clinton.

Mr. Flexner's objective work adds little to our knowledge of Arnold. It is John André, the Spy, who emerges as the new character, through discovery of his long buried manuscripts in England and Australia. Hitherto we had thought of him as poet, artist, actor, scholar, all-around gentleman who ended pitifully but bravely. Now, through his own words, we see him as subaltern in the field and staff officer. He first fought the despised rebels (led by Arnold) at the Sorel River, was later captured, interned at Carlisle (he loathed rebels more after closer contact), and exchanged. The polish displayed in Philadelphia and New York Tory circles could be exchanged for the brutality of the soldier in campaign. (To Clinton: "Have we not fire as well as the sword, a horrid means yet untried?") And it wasn't cruel fate that thrust André into the role of intermediary, nor his desire to Do Something for England. André was ambitious, and as Major and Adjutant General of His Majesty's Forces in North America, he longed for the opportunity that would assure advancement under Clinton or security should Sir Henry be relieved. He thought that opportunity had arrived in Arnold's defection.

So here for the first time we have an account of the real circumstances in their lives that brought together the Traitor, the Spy, and the Temptress, with the narration done in highly dramatic detail. In using it the military reader will bemoan the absence of maps to illustrate the actions involved. The scholar will be handicapped by the separate publication of the source references, available only on request.—N. J.A.

#### HOW TO WIN

**HOW TO BE A CONSISTENT WINNER IN THE MOST POPULAR CARD GAMES.** By John R. Crawford. Doubleday & Co., Inc., Garden City, N. Y., 1953. 256 Pages; \$2.95.

If you toy with or work at bridge, canasta, samba, poker, pinochle, hearts, cribbage, pitch, blackjack, or gin, you'll find something in here to make your game better. Mr. Crawford presumes you have some knowledge of the game so he skips the elementary stuff and goes right into the winning methods and plays. He offers nothing really new, but his approach to things and the convenient organization of the book make it a most useful refresher. He gives enough practical examples of plays to underline his points, and his ten-point summary of the strategy and tactics of each game is particularly useful.

Some of you may remember Cpl. Crawford's work on crooked gambling during the war, and also that of the pre-eminent John Scarne. Crawford and Scarne don't always agree on the odds for or against various plays, but don't let that worry you too much. They approach cards from a con-



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## NEW TITLES OF NOTE

### TRIUMPH AND TRAGEDY

By Winston Churchill (prepub.) \$5.00  
(After 30 Nov.) \$6.00

### FROM DOWN UNDER TO NIPPON

By General Walter Krueger... \$6.50

### STANTON

By Fletcher Pratt ..... \$5.95

### HOW TO BE A CONSISTENT WINNER AT MOST POPULAR CARD GAMES

By John R. Crawford ..... \$2.95

### THE NEGRO IN THE CIVIL WAR

By Benjamin Quarles ..... \$5.00

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siderably different angle. Crawford's book is well worth looking into.—RICHARD GORDON McCLOSKEY.

#### HOW TO ESCAPE

THEY HAVE THEIR EXITS. By Lt. Col. Airey Neave, D.S.O., O.B.E., M.C. Little, Brown & Co., Boston, 1953. 275 Pages; Illustrated; \$4.00.

"Escape," writes Colonel Neave, "is not only a technique but a philosophy. The real escaper is more than a man equipped with compass, maps, papers, disguise and a plan. He has an inner confidence, a serenity of spirit which makes him a Pilgrim."

Colonel Neave had enough of the philosophy to get transferred to Colditz—the "escape proof" fortress reserved for incorrigible "escapers." He beat that one, too, the first man to do so. His philosophy was so practical that he returned to the Continent to work with the French Resistance in rescuing Allied airmen, and took a leading part in rescuing the survivors of the First Airborne Army at Arnhem.

When the war was over, Neave had the pleasant-unpleasant job of delivering the indictments to the top-flight Nazi leaders: Keitel, Hess, Goering, Jodl, Doenitz and others.

Colonel Neave's story is a grand one, but somehow he fails to instill it with any sense of excitement or strain. The confirmed escape fan will find a distressing lack of detail.—RICHARD G. McCLOSKEY.

#### COUNTER-ESPIONAGE

LONDON CALLING NORTH POLE. By H. J. Giskes. William Kimber and Co., Ltd., 1953. 208 Pages; Glossary; \$3.50.

London Calling North Pole is one of the stories of almost unbelievable success that occasionally crop up in the field of counter-espionage. There is no doubt that the incident happened, first because the author of the book is the former Chief of German Military Counter-Espionage in Holland, Belgium and Northern France and, second, because it is supported by an epilogue to the book written by a captured agent who was, in a way, responsible for the whole thing.

This is the story of how, for twenty months, the MID-SOE London radio links with their supposed agents in Holland were under German control, causing the loss of about fifty Allied agents, a number of aircraft, and large quantities of arms and equipment. The damage to the Dutch resistance movement must have been incalculable.

H. M. G. Lauwers, the agent who was first arrested, consented to turn over his code to the Germans and to play back his transmitter. This, he explains in his epilogue, was not particularly unusual since MID-SOE in its turn would be glad to have a radio link with the Germans which was above suspicion. This was to be accomplished by having the captured agent fail to transmit his security check once the set had been captured. This would indicate to the British that the agent had been arrested and the set was being "played

back" by the Germans. The British could then set about deceiving the Germans on their own account.

Lauwers maintains that he followed this procedure and that his directors in London failed to notice the omission or any of the warnings he worked into later messages he sent for the Germans. This apparently incredible stupidity is the most difficult part of the whole story to believe, and we shall probably not have it confirmed because, although this hassle has caused loud screams for investigation in England and in Holland, British intelligence has said nothing for publication.

London Calling North Pole is difficult to evaluate for that reason—because it tells only two sides of a three-sided story. But it does show in detail how good, routine counter-espionage works pays off—in this case, of course, with more spectacular success than usual.—ORVILLE C. SHIREY.

#### BOOKS RECEIVED

THE ORIGINAL CONFEDERATE COLT. By William A. Albaugh III and Richard D. Steuart. Greenberg, Publisher. 62 Pages; Illustrated; \$5.00.

THE WISE BAMBOO. By J. Malcolm Morris. J. B. Lippincott Company. 253 Pages; \$3.50. Malcolm Morris' account of his management of Tokyo's famed Imperial Hotel under Army supervision. Humorous.

THE POWDER FLASK BOOK. By Ray Riling. Robert Halter, Publisher. 496 Pages; Illustrated; \$25.00 A really monumental work on powder flasks, object of one of the current collectors manias, magnificently printed and illustrated.

THE CITY. By Julius Horwitz. The World Publishing Company. 219 Pages; \$3.00. Stories and sketches about New York by a talented new short story writer.

SHADES OF SCOTLAND YARD. By S. Theodore Felstead. Roy Publishers, 1953. 206 Pages; Illustrated; \$4.00. Stories grave and gay of the world's greatest detective force.

PASSAGE EAST. By Carleton Mitchell. W. W. Norton & Company, 1953. 240 Pages; Illustrated; \$5.00. The story of the yawl *Caribee* in the exciting small-boat race between Bermuda and England.

SOPRANINO. By Patrick Ellam and Colin Mudie. W. W. Norton & Company, 1953. 288 Pages; Illustrated; \$3.75. The record of a 10,000-mile voyage over the ocean in a midget sail-boat.

THE STRUGGLE FOR POLAND. By H. Peter Stern. Public Affairs Press, 1953. 79 Pages; \$2.00. The story behind Poland's collapse into the Soviet orbit.

THE UNITED STATES AND ITALY. By H. Stuart Hughes. Harvard University Press, 1953. 256 Pages; Index; \$4.00. A volume in Harvard's "American Foreign Policy Library."

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